



TRAVELS
THROUGH
SWEDEN, FINLAND, AND LAPLAND,

TO THE
NORTH CAPE,

IN
THE YEARS 1798 AND 1799.

BY JOSEPH ACERBI.

Sistimus hic tandem, nobis ubi defuit orbis.

IN TWO VOLUMES.

ILLUSTRATED WITH SEVENTEEN ELEGANT ENGRAVINGS.

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TRAVELS	

T R A V E L S
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L A P L A N D.

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CHAPTER I.

Departure from Kengis—A heavy Shower of Rain—Passage by the Cataracts—Arrival at Kollare—Smoke used in the Houses for the Purpose of keeping off the numberless Insects—Country near Kollare—Meet with a most skilful Boatman—Dangers and Difficulties surmounted under his Conduct—More of the Cataracts—The Boats drawn for a considerable Distance over the Land through a Wood—Embarassment caused by the boggy Ground in the Wood—The Cataract of Muonio-kojki: a successful Attempt to descend this Fall in a Boat.

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HAVING set out from Kengis, we did not change our boat till we reached Kollare, a distance of twenty-two miles. We performed this voyage in twelve hours, in the course of which our boatmen had only five hours rest. We were surprised by a heavy fall of rain, which poured upon us for half an hour in such

large drops, and with such violence, that we began to fear it would fill the boat. I had not seen so copious a shower since I left Italy, nor did I think it usual in this high latitude. The rain was so round, and the drops so large, that we lost sight of the surrounding objects, insomuch that our view was confined to the distance of eight or ten feet all around us. This was the first and only time we heard any thunder in our travels towards the North. Our tent hitherto had only been an encumbrance to us, but the period was approaching when we should find its use. In the progress of our navigation as far as Kollare, we encountered many cataracts, but we became so accustomed to them, that what at first was a cause of terror, became at length an object of amusement. Once it happened that we got aground upon a rock in the middle of the river. Our Finlanders pushed the boat on a large round stone, so that it hung on its surface, while we remained suspended by our own equilibrium. Instead of trembling at this singular situation, in which we could not continue a moment without imminent danger of falling into the water, it excited in us an immoderate fit of laughter; a circumstance which seemed greatly to surprise and divert our boatmen.

The village of Kollare is inhabited by Finlandish peasants, who seem to be very much at their ease. The young woman we met at Kengis was come home, and had prepared for us beds, excellent milk, butter, and meat of the rein-deer in abundance. She was in the house with her mother and a girl of the neighbourhood; the male part of the family were gone a fishing. This young person

son had a gaiety and natural vivacity very uncommon in a country like this. Her figure was fine, though very tall, being near six feet in height. She spoke with ease, and replied to our dumb shew by smart repartees, at which we laughed upon trust, but which our interpreter found excellent, and full of wit and humour. The village is situated upon a small island, which is the property of the inhabitants. The island is formed by the river Muonio, which here divides itself into two branches. The people cultivate barley, and have some meadow grounds with excellent hay.

The first favour the women conferred upon us was to fill our room so full of smoke, that it brought tears in our eyes. Their intention was good, they wished to deliver us from the molestation of the gnats; and as a mean of very effectual prevention, they made a second fire near the entrance of the apartment to stop the fresh myriads of those insects which were ready to rush in upon us from without. A thick smoke is an object of great luxury in this part of the world. Those insects, which are the scourge of that country, became indeed very troublesome to us; and our gauze veils and gloves could give us no protection against their singing in our ears, and interrupting our sleep. Here our own resolution, as that of our servants formerly, for the first time, began to be shaken.

The landscape at this place is pleasing: all along the banks you have the birch and other trees, which form a contrast with the uniformity of the pines and the firs. The face of the country is rather flat, and it is only at a certain distance that you discover hills of some size.

We had the good fortune to meet here four of the most experienced boatmen we had seen in the whole course of our travels. There was one of them called Simon, whom we named by way of eminence, *the Bonaparte of the Cataracts.* It is impossible for me to give the reader an idea of the excellency of his tactics, his courage, his address, the justness of his eye in judging from the surface of the water the nature of the bottom, and in ascertaining, with the most scrupulous precision, the depth of the river. Had it not been for the resolution and steadiness of this man, our expedition must have ended at Kollare ; for the obstacles to be encountered between this place and Muonionisca are so seriously discouraging to common boatmen, that they would have refused to a man to conduct us any farther.

The passage from Kollarc to Muonionisca is a distance of sixty-six miles, entirely upon the river Muonio, and constantly in opposition to cataracts and the current. The fortitude and perseverance with which those people bore this long and extraordinary labour, shew the astonishing power of habit. Where the river was too strong and violent for our boats, which owing to the weight they carried drew too much water, to make good their passage, we were forced to disembark and haul our empty boats along the river. The Finlanders who were employed in dragging the boat, kept on the bank, leaping from stone to stone, and sometimes went up to the middle in water to disengage the rope from the rocks, where it had become entangled. Sometimes the boats themselves were obstructed in their passage by the rocks, in which

case one of the men threw himself into the water, swam up to them, and set them afloat again. At last we came to a place where the extreme force of the cataract, the depth of the water, and the obstructions from the rocks, rendered it to appearance altogether impossible to continue our progress. Our brave Simon was the only person who thought every thing possible. The rest seemed disposed to find fault with his daring projects, which they never lessened; but, on the contrary, magnified through their fears. But he was always the first to set an example of the most unwearied patience and activity; he constantly charged himself with the execution of the most arduous and laborious part of the undertaking, and never proposed a thing in which he did not reserve for himself the most difficult and hazardous offices it imposed: in short, no perils could daunt his spirit, no toils set bounds to his exertions. He hauled the boat, he disengaged it when it stuck fast; he was the first to leap into the water whenever occasion required, and seemed to do every thing himself alone.

While our Finlanders were displaying the most heroic perseverance on the river and on its banks, the utmost we could do was to keep up with them in the adjacent wood. It was not always possible to follow them close to the river, as we were not, like them, able to jump from one rock to another. The current too sometimes produced a giddiness in the head, and we were unwilling to wet our legs by wading through the water. Another species of fatigue still awaited us in the woods: we sunk here and there so

deep

deep in the moss, that we thought we should be immersed in it up to our necks. We sometimes met with places so deep and boggy, that it was highly dangerous to set a foot upon them. The branches everywhere intercepted our passage, while the veils we wore on our faces, to protect them from the stings of insects, caught hold of the branches, and were in danger of being torn in pieces by every twig. Tall fir and pine-trees, which the wind had levelled with the ground, and which time had almost converted into dust, lay scattered in the woods. We wished to escape the embarrassment of the moss, by stepping along the trees that lay in our way; but we found their substance generally so rotten and decayed, that now and then they suddenly gave way under our feet, and we could with difficulty save ourselves from falling.

In this manner we had travelled about two English miles, when notice was given us that the cataracts were become so formidable, that there was no chance of carrying the boats farther up the river. To proceed without our boats was not to be thought of, it being impossible to get to Muonionisca but by crossing the river Muonio; and besides, there was another smaller river at the opposite side. The only expedient we had left was to haul the boats on shore, and to drag them about two miles through the woods, where we would come to a part of the river more quiet and practicable for sailing on. Simon was the first to embrace this resolution; and without knowing that we had travelled on the sea drawn by horses, he proposed that we should travel

over

over the land through a thick wood in a boat. We were not inhuman enough, however, to take advantage of Simon's magnanimity, and to place ourselves in the boat, for its continual friction against the moss and trees rendered it so weighty, that it required the whole force of our four boatmen to draw a single boat at once without any thing in it. At length we got to the end of two miles, and we were very glad to repose while our men returned for our baggage and the other boat. In the course of this journey, being invited by an uncommon noise of the river, we drew near to have a view of the famous cataract of Muonio-koski; and though we judged it impossible to descend with such a current, we were, nevertheless, bold enough to attempt and accomplish it on our return. As this cataract is the most dangerous that we passed in the whole course of our river navigation, I shall endeavour to give the reader a description, as near as I can, of the manner in which the passage is performed.

Let him imagine a place where the river is so hemmed in by narrow banks, and so compressed with rugged and shelving rocks, that the current is doubled in its rapidity; let him moreover represent to his mind the formidable inequalities in the bed of the river, occasioned by those rocks, which can only be passed by a sort of leap, and consequently make the water extremely turbulent; let him conceive that, for the space of an English mile, this river continues in the same state: and let him, after all this, consider the hazard to which a boat must be exposed that ventures itself on such a surface, where both the nature of the channel, and the

amazing velocity of the current, seem to conspire to its destruction. You cannot perform this passage by simply following the stream; but the boat must go with an accelerated quickness, which should be at least double to that of the current. Two boatmen, the most active and robust that can be found, must use their utmost exertions in rowing the whole time, in order that the boat may overcome the force of the stream, while one person is stationed at the helm to regulate its direction as circumstances may require. The rapidity of this descent is such, that you accomplish an English mile in the space of three or four minutes. The man that manages the rudder can, with difficulty, see the rocks he must keep clear of: he turns the head of the boat directly in the line of the rock he means to pass, and when he is in the very instant of touching it, he suddenly makes a sharp angle and leaves it behind him. The trembling passenger thinks that he shall see the boat dashed in a thousand pieces, and the moment after he is astonished at his own existence. Add to all this, that the waves rush into the boat from all sides, and drench you to the skin; while, at other times, a billow will dash over the boat from side to side, and scarcely touch you. It is a situation which presents danger in such frightful shapes, that you could hardly open your eyes and refrain from trembling, though a person with the greatest certainty should assure you that you would not suffer any harm. Several people, however, have perished in this place; and there were but two men in the village of Muonio who thought themselves qualified to conduct the descent: these were an old

man

man of sixty-seven years of age, and his son of twenty-six. The old boatman had known this passage twenty years, and navigated it always with success, and in the course of that period he had taught his son his own dangerous calling. It is impossible to conceive any thing more striking and interesting than the collected and intrepid expression of the old man's countenance in the progress of the passage. As our resolution to descend this cataract was not adopted rashly, but after a minute enquiry and cool reflection, we were prepared to observe the detail of our adventure in its most trifling circumstances. The old man never sat down, but stood upright, holding the rudder with both hands, which was tied on purpose for the occasion to the stern of the boat. In passing the smaller cataracts, they descend with the rudder untied, which they hold between their arms, and sit all the while. When we were in the most critical moments of the passage, we had only to cast our eye on the old man's countenance, and our fears almost instantly vanished. In places of less difficulty he looked round to his son, to observe if he had proceeded with safety. It was plain his thoughts were more occupied about his son than himself; and indeed the young man grazed the rocks on two different occasions. As soon as all danger was over, we drew in to the shore to repose and enjoy the triumph of our success. It was then we remarked that the son, who had piloted the second boat, looked extremely pale through terror; and my companion's servant, who had been in his boat, informed us that they had received two violent shocks, and that on both occasions he gave himself up for lost.

CHAPTER II.

A small Colony of Finlanders between Kollare and Muonionisca—Charming Country around that Colony—Rules of Colonization observed in Lapland—The Village of Muonionisca—The Parson of the Parish—The Inhabitants of this District: their Manners and Mode of Life.

IT cost us two days and two nights to accomplish these sixty-six miles; and before recommencing our laborious travels, we stopped at a small cottage, where we found a little colony of Finlanders which seemed extremely poor, and by their particular situation interested us very much.

The colony consisted of two families only, who lived altogether in the same cottage, and amounted to seven persons, including two women and a young child. The situation of this little community made a powerful impression upon our minds. The surrounding country is delightful; a number of small wooded islands serve to embellish the course of the river, which here occupies a broader channel, and glides on with a more placid current: the opposite banks are adorned with trees and verdure. Nature seemed to smile all around this solitary mansion, while peace and good humour reigned within its humble walls. This little community,

nity, cut off and insulated from all society for five months in the year, have neither priest nor temple. They are separated from Muonionisca by the many obstructions which we have described in the former chapter, and from Kengis by a journey of three or four days, going and returning, the whole of the way of which is rendered difficult by cataracts of a most painful and laborious ascent. These people, accustomed to live in the most perfect solitude, having seldom an opportunity of seeing those who reside nearest to them, were astonished when we made our appearance. The natives of Kollare dislike to encounter the cataracts, and consequently submit to the fatigue of ascending the current of the river, only when they have some special reason, which occurs but seldom. The colonists subsist by the labour of their hands, and the scanty produce of their fields. Their property in land extends six miles around their dwelling; and lakes, rivers, fishery, woods, and meadows are exclusively their own, within a circle whose radius is six miles. Such extensive property in land formed a striking contrast with the indigence of the possessors. They had only four cows; they sowed but one barrel of barley, which in good years produced them seven barrels, but sometimes did not return them even the seed. One year their harvest was so very bad, that they must have died of famine, but for a merchant of Torneå who passed this way, and gave them a supply. This happened at the beginning of their colonial existence, when they had first come to settle in this place. They were a couple of Finlandish families who had resided at Muonionisca; but having nothing

thing to live upon, they resolved to emigrate, mutually to support each other, and to fix their abode in a remote corner of the country, where they might acquire some property. Whoever is disposed to establish himself in Lapland has only to chuse his situation, but it must be at the distance of six miles from the bounds of the nearest village ; and the moment he has built his hut, all the land for six miles round him is his own by right of possession.

The traveller, who in his excursions visits this country in summer, will be enchanted, at every step he takes, with the smiling aspect of those hills and lakes, and with the variety and softness of the pictures which present themselves in succession to his eye. If that traveller should have been the victim of those vices and passions which riot in great towns, and countries highly civilised and refined ; should he have narrowly escaped being shipwrecked on the tempestuous sea of ambition ; or should he have suffered the mortification of a disappointed self-love, and all the quietude of an overweening conceit of his own merit ; should this miserable man have never found one with whom he might share his pains and his pleasures ; should he, in short, have never tasted the sweets of genuine friendship—ah ! how ought such a disturbed and afflicted mind to covet the innocence and simplicity of this country ! How fortunate would it be for him, could he exchange this, with its artless joys, for the high blown luxuries in which he had hitherto lived. But alas ! there is nothing on earth perfect ; no human enjoyment is without alloy. Even that spot, which I have described as so peaceful and charming, has its share of misery,

which

which diminishes or even destroys its attractions. The long continuance of the winter and its horrors; the oppressive multitude of tormenting insects in the summer, would, in the opinion of most men, counterbalance any advantages which the beauty of the situation, or the allurements of rural life, could present. But, after all, where can the unhappy find peace and joy; what region can shelter him from the sorrows that dwell in his wounded heart? If content be not the inmate of his bosom, it is in vain to seek for it in distant countries: it is a phantom that will constantly elude his grasp. A change of climate cannot relieve the conflict in his breast; and why should he fight without, since the battle rages within! Happiness, like the sun's rays, is dispersed over the whole earth: it is distributed, though with apparent inequality, yet with impartial justice. The Laplander is without night in summer; but he is also without day during his long winter. Nature balances all things.

Muonionisca is a village composed of fifteen or sixteen dwelling-houses, irregularly placed on the left bank of the river Muonio. Eastward it is bordered by a chain of mountains, of which Mount Pallas and Keimio-tunduri are the most considerable; towards the north, and at a short distance, the woods terminate the view, which is the case also towards the west and south, into which quarter the river holds its course. *Muonio* is the name of the river, *nisca* signifies beginning; and the village is so called, because it is the place where the river begins to assume a regular form. At Muonionisca there is a church and a parson, who, like that

that of Kengis, is under the superintendence of the minister of Upper Torneå. The parish of Muonionisca is about two hundred square miles in extent, and the parson is to all appearance a peasant; like any of his flock ; having nothing visible about him that refers to his clerical dignity, except a pair of *black breeches*. This poor man had the misfortune of being ruined by a fire, which consumed all his household furniture with his library, from which he could not even save his bible. This loss however was not what he seemed to have felt most severely, as he observed, that after this disaster, he found himself eased of the burden of reading Latin, a language in which he sometimes attempted to converse with us, but which, in his mouth, formed such a jargon as made us laugh, though it did not promote the interchange of ideas. The honest parson was of great use to us during our stay at Muonionisca ; he attended us everywhere, was ready to explain on all occasions where we found difficulties ; and as he was well acquainted with the Finlandish and Swedish languages, was able to give us the etymology of many words that we met with and wished to understand. He was the most clownish parson I ever saw in my various travels ; and I believe that calamity and extreme distress had contributed more than any thing to reduce him, in point of personal consequence, to a level with the meanest of his parishioners. This man, however, possessed a large share of strong natural sense ; he reasoned with much justness and sagacity on the subject of politics ; and as he was a poor and humble being himself, he violently declaimed against the manner in which the aristocracy and

and high clergy abused their riches. As a politician he was a determined enemy to every thing despotic ; he had infinite respect for Bonaparte, and one would have thought he entertained some idea that the conqueror of Italy might one day come to Muonio-nisca, and make him superintendent minister of Lapland. He was particularly hostile to Russia and its government, which he said debased the people, and kept them, from policy, in a state of brutish ignorance. Sometimes he would discourse on the abuses of birth and hereditary succession, in a manner which I was astonished to hear from a man, who had nothing in the world but a shirt, a pair of breeches, and the shoes on his feet. I imagined that some modern book on those subjects had fallen into his hands ; but when he gave me an account of the works that composed his library, I found it had consisted of nothing but tracts of divinity, and books on theological controversy. What astonished me most was, that this sort of reading had not bereft him of the good sense nature had given him ; but he assured me he had studied those volumes as little as possible. He was the better pleased to see travellers, because they never could be any inconvenience to him, since being very ill lodged himself, it could not be expected he should find them accommodation ; and besides, by their arrival he was sure of some glasses of brandy, with which we used to regale him as often as he came to see us. He declared our brandy was delicious ; and with each glass he swallowed, pronounced its eulogium in a manner equally energetic and sincere. In this country, far removed from the infection of our corrupt manners, flat-

terry and parasitical praise are but little in fashion, and consequently we did not suspect the parson of dissimulation, or that he was not perfectly satisfied as to the good qualities he ascribed to that beverage.

I shall now lay before the reader what information I was able to collect, respecting this village and the manners of its inhabitants. The population of the whole parish consists of four hundred souls, dispersed over a surface of nearly two hundred square miles. The inhabitants are all of them Finnish emigrants, who came and settled here, and who consequently speak the language of Finland. All travellers who have visited this country have named the people Laplanders; and I have in some degree conformed myself, in the course of this work, to the same prejudice, but I have distinguished them by the appellation of Finnish Laplanders, or in other words, Finlanders settled in Lapland. Their habits and manner of life are nearly the same with those of the natives of Finland; and, indeed, there is no difference but what is produced by climate and their topographical situation. It is very remarkable, however, that the Finlanders settled here, like the pastoral Laplanders, know nothing either of poetry and music, or musical instruments. Surrounded with lakes and rivers abounding in fish, they take little concern in agriculture, but depend chiefly for subsistence on the precarious resource of fishing, or on the still more uncertain fruits of the chase. The qualities, as among all savage nations, in the highest estimation in the male sex, are bodily strength and activity. They enjoy the appetite of

love,

love, but have little experience of the sighs and tender emotions of that passion. The people have a gloomy and serious deportment: the youth of both sexes remain in the company of each other without the least of that playful gaiety which is so becoming in their years. I never once observed a young man direct a smile of complaisance towards a young woman. It is a pretty general custom, however, for the youth of both sexes to sleep together, and what is still more extraordinary, without producing any decisive evidence of too much familiarity. The father charges himself with the marriage of his child; and the union of the parties is a contract rather dictated by family convenience than by any predilection for each other. At the same time there have been instances of jealousy, and even of madness occasioned by this passion. There was a woman, it seems, still alive, who became insane from love, and who in her frenzy killed her own daughter. She is said to have entertained a violent suspicion of a woman, whom she supposed had engaged the affections of her husband. We find contradictions in the character of every people on earth, and this is a striking example in corroboration of that observation. There is not an instance of either robbery or murder known in this country; but cases of suicide have happened: people have drowned themselves, or made attempts upon their lives in one shape or another. Such excesses are there attributed neither to want nor to the passion of love, but to madness, occasioned by some natural cause, or to violent depression and lowness of spirits.

The food of these people in summer consists of fish dried in the sun. When the fishery happens to be very productive, they sell the surplus, or give it in exchange for meal, salt, or iron, which they want for domestic purposes. They like better to receive meal in exchange for their fish, than to apply themselves to the labour of the soil. Among them agriculture is still in its primitive state. They make no use of the plough, but work the ground by the force of their arms, though the parson has been at much pains, but without success, to teach them the advantage of that implement. He used himself to yoke his cow to the plough, and cultivate a small field of his own, in order to set an example to others. As soon as the snow has begun to fall in autumn, they carefully observe the traces of the bear, and go out to attack him in parties of three or four persons. About the middle of August, the season when the birds cast their feathers, they have considerable success in the chase of wild ducks and other aquatics, which they knock down with the oar, these animals being then unable to escape from them by the assistance of their wings.

When they have cut down their hay and sufficiently dried it, they put it upon a sort of frame, raised high above the ground, on four posts, so as not only to secure it from being humid by the overflowing of the river, but also from being carried away by the force of the current. Some of them possess reindeer, which in summer they intrust to the care of a Laplander, who conducts them into the vallies among the mountains, and watches and attends them in their pasture.

The people are extremely sober, they never drink spirituous liquors, except on marriage days, when they indulge, but not to excess, in mirth and gaiety. The ceremony of marriage is followed by a dinner in their style, and afterwards by a dance, but without music of any kind, except their cries and the snapping of their fingers. They have no relish for beer; and when we prevailed upon them to taste our wine, they made wry faces and took it for physic. The parson assured us in the most pathetic accents, that there was not a single glass of brandy to be had in the whole two hundred square miles of his parish^{*}; he told us likewise, that drunkenness is regarded by the people as the most scandalous vice to which a man can be subject: and we could not help suspecting that this was one of the causes of his being so little revered and esteemed by his flock.

Disease and sickness are extremely rare among these people; there have been instances of peasants in this parish, who have lived to the age of one hundred and ten years: and the only disorder that proves fatal to the inhabitants, is a kind of inflammatory fever.

CHAPTER III.

Excursion from Muonionisca to Mount Pallas, and Keimio-Tunduri—Rivers Muonio and Jeres—Pleasing Scenery about the latter—Different Terms of the Finlanders for a Mountain, according to its peculiar Quality—Prospect from Keimio-Tunduri—Mount Pallas inaccessible—Face of the Country—Snow on Mount Pallas, and Ice on a Lake—Some Objects in Natural History collected.

A DAY and a night spent at Muonionisca served to recover us from the fatigue of our late journey, and the following morning we found ourselves disposed to make an excursion into the country. Our honest parson was our guide in this expedition. He made an excellent fellow traveller, accommodated himself to every thing ; and what rendered him still more agreeable to us, was, that we found him by no means a mere novice in the pursuits of natural history. Dr. Quenzel, who made the same tour, had him for his companion, and instructed him in different particulars : he was, for instance, no stranger to the names of certain insects, such as the *coccinella trifasciata*, and the *cureulio areticus* ; in the department of ornithology he knew the *motacilla suecica*, the *turdus roseus* ; and in that of fishes, the *salmo alpina*.

We directed our course towards Mount Pallas. The name of this

this mountain seemed to us rather extraordinary, but our friend the parson was unable to explain its meaning, nor could he ever give us any thing like a plausible etymology of the term. Our design in this excursion was to have a view of the surrounding country from the top of that mountain, to collect, as we went along, plants, birds, insects, and shells from the bed of the river ; to make a drawing of any picturesquc object that might present itself, and to fall in with some wandering Laplander watching his rein-deer, which pasture in the glens and vallies of those mountains. We had no choice as to our manner of travelling, and were obliged to proceed by water to the very foot of the mountain. Having sailed down the river Muonio, we went up the small river Jeres, which runs into the Muonio, three miles from Muonionisca. This little river flows for the greatest part in a peaceful stream, and spreading itself at certain short intervals, forms charming little lakes, traversing a country the most pleasing and diversified possible. Birds, and especially wild-ducks, swarm on this river, and afforded us a very singular kind of sport. In certain places the channel becoming narrow, the willows and other trees of the opposite banks unite and entwine their branches, so as to compose a species of bower, which skreened us from the rays of the sun. The wild-ducks frequently flew into those recesses, but not thinking it prudent to venture far amongst the trees, made a precipitate retreat : on their return they passed directly over our head, and offered us the best opportunity possible for shooting. This river exhibited the finest scenery a painter could

could desire in the mild and rural style. As we approached close to the mountain we came upon a large lake which forms the source of the river. This lake is intercepted, however, by a cataract of very considerable length, so incumbered with stones, that scarcely an empty boat could have proceeded upon it. The necessities of these people impelled them to make an attempt to remove some of the stones in this lake, and to turn them to one side for the purpose of deepening the water in the middle, and so to facilitate the passage of their fishing-boats. We were assured, that the first persons who succeeded in surmounting the obstacles which separated the navigable part of this river from the lake, had each of them, after fifteen days fishing, four or five barrels of fish for his own share.

Mount Pallas, at a distance, has a very fallacious appearance, seeming to be of no considerable size, but becomes more imposing in proportion as you approach it. The parson informed us, that the Finlanders have six words to express a mountain, each of which serves to denote some distinctive quality in the object; viz. 1st, *Sadio*, which signifies a small rising ground, furnished with wood; 2dly, *Rova*, one of a more considerable eminence, covered with stones; 3dly, *Wara*, a hill with a tuft of trees; 4thly, *Kero*, a large hill with brushwood here and there on the surface; 5thly, *Tunduri*, denoting a high naked mountain; and also a 6th name, which is *Selke*, signifying a long hill, without any allusion to its height.

After doubling certain points and promontories, we rowed the boat

boat as near as we could to the mount Keimio-tunduri, which we immediately began to climb. The ascent is extremely difficult and troublesome, in as much as we had not only to climb, but to open a passage with our hands across woods which nobody perhaps ever penetrated before, at least certainly not from motives of amusement. At last we came to a part of the mountain which is bare of trees, where we found, with some concern, that it was impossible for us to get to mount Pallas, by reason of swamps and small lakes, which insulated the mountain, and which were themselves secluded from one another by impassable marshes. At the top of Keimio we had all around under our eye a vast prospect, which afforded us a most perfect idea of the country. Towards the east and west, the surface is covered with small hills as far as the eye can reach, whose tops seemed to mix with the skies at the horizon; northward, mount Pallas lifts his head far above the other objects, and looks down upon all the adjacent mountains: but the view towards the south presented an immense tract of country wholly inaccessible and impenetrable to man, consisting of a dismal and dreary extent of swamps and marshy soil.

The whole of what we saw was more calculated to interest a geographer than a painter, who could perceive very little that would suit the purposes of his art. Between us and mount Pallas lay a small lake, on whose surface the ice had not yet entirely disappeared: being situated in the bottom of the valley, it was screened from the solar rays, and as it was probably formed of snow water, which had run down from the mountains, it might

be less pervious to the warmth of the atmosphere. The snow was entirely gone on Keimio, but we observed it lying here and there on mount Pallas, a circumstance probably owing to the difference of their respective elevations.

We made various perambulations round this mountain in search of birds and plants. We found a couple of grouse (*tetrao cugopius* of Linn.) which were more than one half white; and also a couple of *emberiza nivalis*, Linn. which were just beginning to change the colour of their plumage; they were still almost entirely white.

The fish of the lake are the following:

Salmo albula

Cyprinus alburnus

Perca fluviatilis

Esox lucius

Gadus lota

On our return homeward we examined the channel of the river for shells, in which it is not unusual to find pearls. We found the species called *mya pictorum*, but the pearls were scarcely visible, and in all of them so very trifling, that we thought them not worth our notice. Our attendants were astonished at the zeal with which we pursued our researches; nor had they the smallest conception of their utility. The parson himself was at a loss to discover what real advantages we could propose to ourselves by the investigation of insects and plants. Since his library was destroyed, he had found that he could easily dispense with divinity, and fancied he had discovered that divinity, viewed as a science, was entirely useless, and that the sciences in general were good for no-

thing

thing in the world, except in so far as they amused the intellect, and served to banish the listlessness of human life.

As we fell down the river we were presented with scenery altogether different from what we had seen in ascending it. One part of our plan still remained to be accomplished, I mean that of traversing the mountains in quest of the Laplanders and their reindeer; but we were so extremely fatigued, that it was deemed more wise to return to Muonionisca. We had made a tour of thirty-six miles in the space of twenty hours, almost without halting. The heat of the weather was excessive: Celsius's thermometer at noon rose in the shade to 27 degrees; and the gnats tormented us incessantly. Upon our arrival at Muonionisca, we resumed our usual occupations; and having enjoyed a little repose, we began to prepare for our departure.

Our abode at this place made some addition to our collection of natural history. We obtained, among other things, several specimens of the *motacilla suecica*, with their eggs and nest. We got also a magnificent *larus*, which a Laplander killed on one of the neighbouring lakes. It turned out to be the *larus glaucus* of Linnaeus. Besides this we collected a considerable quantity of plants and insects.

CHAPTER IV.

*Departure from Muonionisca, July the first—Excessive Heat—Travel by Night—A Settlement called Pallajoveniö—Proper Boundary of Lapland—Mistake of Travellers and Geographers concerning Lapland—Face of the Country between Muonionisca and Pallajoveniö, and thence to Kautokeino—The small Rivers of the Country offer more Novelty than the greater ones—Difficulties arising from shallow Water—The Rein-deer Moss (*Lichen rangiferinus*, Linn.) covering the whole Surface of the Ground: Vegetation near it—Arrival at Lappajervi—Musquetoes exceedingly troublesome—Fires and Smoke the most effectual Protection against them—Some Lapland Fishermen—Their Habitations—A Night passed with these People, and Accommodation afforded.*

WE set off from Muonionisca on the first day of July, about ten o'clock at night. The atmosphere was heated to a degree nearly suffocating throughout the whole of the day. The thermometer of Celsius shewed at noon 29 degrees; at midnight it fell down to 19 degrees. The water in the rivers and lakes was clear and limpid, and we should gladly have bathed ourselves, had we not been deterred from such a resolution by the musquetoes, who would have devoured us alive, if we had exposed ourselves

to their fury without the protection of our clothes. We chose to pursue our journey at night, and came to a determination to observe the same rule in future, and take our rest in the day-time, in order to enjoy that temperature of the air which in the night season is produced by the obliquity of the sun's rays. We ascended the Muonio until we arrived at the little river of Pallojoki, at a small distance from which there is a settlement, or colony, called Pallajoveniö.

This colony is the proper boundary of Lapland towards Torneå; accordingly it is named in the map Torneå Lapmark: therefore until you have reached Pallajoveniö, you cannot be said geographically to have set foot in Lapland. The whole of that vast tract of country which comprehends Lulea, Pitca, and Umea, as far as Tornea, properly belongs to West Bothnia. In this respect travellers are greatly mistaken, and suppose they have been in Lapland when they have got as far as Torneå; whereas West Bothnia makes an angle more to the north, nearly the distance of two hundred and forty miles beyond Torneå. If a person, when in Sweden, wishes to see Lapland merely for the credit of having visited that country, he has no occasion to go farther than Åsele, which is about an hundred miles at most distant from Umea, on the borders of Angermanland; but if he desires to see a country different from any that he has ever seen, and to contemplate the manners of a people unlike, in every particular, to all the inhabitants of Europe, he must proceed northwards, and leave behind him the great towns, and all notions of a civilized state of society.

The

The geographical division of a country is a matter arranged betwixt sovereigns, and does not depend on the hand of nature. The king of Sweden may, with a stroke of his pen, convert into Lapland what is now West Bothnia; but such changes will effect no alteration in the manners of the people, nor in the natural condition of the country.

It is remarkable that Maupertuis who composed an abridgment of geography, should have known so little of a country wherein he made so many observations. He constantly confounds Lapland with West Bothnia, and gives to his journey, which only extended to the borders of Lapland, the title of *Voyage au Fond de la Lapponie*, “a Journey into the Interior of Lapland.” All other travellers after him seem to have fallen into the like mistake, and fancied they had been in Lapland, when they had got as far as Torneå. They have likewise confounded the Lapland tongue with the language of Finland; and when they have brought with them a servant girl born in the town of Torneå, have supposed they had got a Laplander.

The country from Torneå to Muonionisca and Pallajoveniö, though it changes its appearance to that of a wilderness, does not greatly vary. The mountains are the same; the cataracts, lakes and woods carry a near resemblance: in short, the objects that present themselves to the eye, have not a sufficient degree of diversity to render them worthy of observation. The face of the country, however, proceeding from Pallajoveniö to Kautokcino, by the little river Pallojoki, is very different. The small rivers in

general

general are most interesting to a curious traveller, because they are not so often visited, and both the country and the people are less known; whereas the larger rivers are more frequented, especially in winter, when they serve as a high road for those that come from Muonionisca and Torneå. Hence the natives that live near these rivers become familiar with strangers, and cannot be viewed so much in their own natural character, as those who are merely acquainted with the objects that belong to themselves and their country. The passage northward on the Muonio, from Muonio-nisca to Enonteki, is very similar to that from Kengis to Muonio-nisca, or to that from Upper Torneå to Kengis.

Pallajoveniö is a settlement of Finlanders, consisting of about four or five families. The merchants of Torneå have built a small place, which consists of a room, where they can make a fire, and refresh themselves, as they pass through this colony during the winter, in their way to the fairs. The people of Pallajoveniö appeared to be much at their ease; their dwellings seemed to be comfortable and neat, and different from those of the other peasants of this country.

We refreshed ourselves at this place, and taking our departure, proceeded on the river Muonio to where it joins the Pallojoki, which we ascended in order to get to Lappajervi. This passage, if performed in a straight line, would not be above twelve miles, but owing to the windings of the river, it made a journey of more than thirty. The river Pallojoki presented to us difficulties of a kind we had not experienced during the whole of our expedition.

As

As no rain had fallen in this country for some time, the water was so shallow, that the boat ran aground, and it became necessary to land in order to lighten it. The windings of the river were so frequent and so contrary, that our progress was very tedious. Our boatmen were obliged to undergo great labour in moving the boat forward: sometimes they were compelled to get out and tow it; at other times to lift it up and carry it on their shoulders to a considerable distance, where the bed of the river was nearly dry. In addition to the great exertion and fatigue which these good people had to bear, they were kept constantly wet; and though their toils were excessive, they advanced but little in their journey, since the curvature of the river would often bring them back to a small distance from the place from which they had with so much trouble proceeded. This was mortifying and discouraging in the extreme. We ourselves, who went on foot along the banks, had no better reason to be satisfied with our condition. We had every where to force our way through bushes and briars, and it was with much difficulty that we could go on at all, being frequently stopped by branches of trees, and having the veils torn away which covered our faces, and secured us from the attacks of the musquetoes. However, the sudden change of scene, and the view of the country, together with the novelty of manners and appearance in the inhabitants, made us in some measure amends for these hardships and inconveniences.

Before we arrived at Lappajervi, we halted for some time on a rock of considerable size, which was separated by the river from
the

the adjoining land. Here we made a large fire, in order to drive away the insects, that we might take our dinner with comfort. The country around offered a scene very uncommon, and to us quite new. The moss on which the rein-deer feeds covers the whole ground, which is flat, and only skirted by hills at some distance; but these hills also are clothed with this moss. The colour of the moss is a pale yellow, which, when dry, changes to white: the regularity of its shape, and the uniform manner in which the surface of the ground is decked with it, appears very singular and striking: it has the semblance of a beautiful carpet. These plants grow in a shape nearly octagonal, and approaching to a circle; and as they closely join each other, they form a kind of mosaic work, or embroidery. The white appearance of the country, which thence arises, may for a moment make you imagine that the ground is covered with snow; but the idea of a winter scene is done away by the view of little thickets in full green, which you perceive scattered here and there, and still more by the presence of the sun and the warmth of his rays. As this moss is very dry, nothing can possibly be more pleasant to walk upon, nor can there be any thing softer to serve as a bed. Its cleanness and whiteness is tempting to the sight, and when we had put up our tent, we found ourselves in every respect very comfortably lodged. I had many times before met with this moss, but in no place had I found it so rich. It was the only produce here, which nature seemed to favour and support: no other herb was growing near it, nor any other vegetable on the spot, except a few birch-trees,

with their underwood, and some firs, dispersed on the hill by the river side. All these seemed to vegetate with difficulty, as if deprived of their nourishment by the moss, and appeared withering and stunted. Some trees, indeed, which grow very near the water, had the appearance of being in a flourishing state, perhaps owing to the moisture they derived from the river : but, in short, this moss appeared to be the royal plant, which ruled absolute over the vegetable kingdom of the country, and distributed its bounty and influence amongst a particular race of men and animals.

We arrived at Lappajervi in the evening, and our boatmen were glad to take some rest after their wearisome voyage. When we arrived on the borders of the lake, we fell in with two Lapland fishermen, who had returned from their day's fishing, and were preparing to pass the night there. We were guided to the spot where they were by a large column of smoke, which mounted into the air. On approaching them we found that they had besmeared their faces with tar, and covered their heads and shoulders with a cloth to protect themselves from the musquitos. One of them was smoking tobacco, and the other was securing the fish they had taken from the depredations of the insects. Their meagre and squalid looks discovered evident signs of wretchedness. They were covered from head to foot by swarms of musquitos, from whose stings their clothing scarcely shielded them. They were melting with heat, yet they durst not throw off their covering, much less remove from before the fire. Our arrival added

millions



millions of these flies to the myriads already there, as their numbers were continually increasing in our passage thither. It was impossible to stand a moment still ; every instant we were forced to thrust our heads into the midst of the smoke, or to leap over the flame to rid ourselves of our cruel persecutors.

We drew our boat ashore, and walked about a mile into the country to visit the families of these two Lapland fishers, who had fixed their constant habitation there. We found fires every where kept up : the pigs had their fire, the cows had theirs ; there was one in the inside of the house, and another without, close to the door. The Lapland houses are not so large as those of the Finlanders. The door-way of the one we saw here was only four feet high, so that we found it necessary to stoop as we entered. We had left our tent behind us, supposing we should find accommodation to pass the night with the Laplanders, and that it would at least be equally good as that we had met with amongst the Finlanders ; but we found ourselves disappointed : however, we were forced to put up with what convenience the people could offer us ; and therefore, when it was time to retire to rest, we were accommodated with reindeer skins, laid over small birchen twigs and leaves, which were spread on the ground, in a small apartment filled with smoke. We groped our way into our bed-chamber, because the smoke hindered us from seeing any light. Some time after we had laid ourselves down to sleep, I heard a breathing, which seemed to proceed from a corner of the room, and which we were unable to account for, as we supposed our-

selves the only living creatures in this place. I imagined it was a dog, or some other animal, which had taken his night's lodging there. Presently I heard a loud sigh, which seemed rather to be uttered by a human being than the animal I judged to be our fellow lodger. I raised my head up gently to try if I could discover any thing. Some cracks in the side of the walls, and a few openings in the roof, afforded a faint light, and in order to ascertain the cause of our alarm, I crept forward on my hands and knces. As the distance was but short, I soon reached the spot from whence the sounds came, and found two children naked, and lying upon deer-skins. The children were suddenly awaked, and seeing me approach them in the posture described, fancied themselves in danger of an attack from some wild beast, and ran out of the room, crying to their mother for help.

CHAPTER V.

*Lake of Pallajervi, and the Island of Kintasari—Stay on this Island: Occupations and Amusements—The Sea Swallow (*Sterna Hirundo, Lin.*) : Sagacity of these Birds, and their Utility to Fishermen—Some Laplanders engaged for the Prosecution of the Journey—Departure from Kintasari—A small River called Restjöki—Description of the Laplanders that were to attend the Author—Their want of Cleanliness—The Finlanders dismissed—Proceed on Foot with the Laplanders—Temper and Disposition of these People—Weather extremely hot: great Inconvenience thence arising—Come to a Lake called Kervijervi, which they cross in Boats.*

AT Lappajervi we received no very encouraging intelligence respecting the possibility of prosecuting the remainder of the way to Kauto Keino. The distance is seventy miles: we had several lakes to cross, rivers to ascend and descend, and difficult swamps to pass over, and could have no hopes of meeting with an habitation, or even a human creature, throughout the whole course of the journey: but we had formed a determined resolution, from our first setting out upon this expedition, not to be discouraged by any account or relation of difficulties, but rather to be witnesses

witnesses ourselves of their reality. To this determination the success of our undertaking is chiefly to be ascribed.

We were given to understand that we might possibly meet with some Lapland fishermen upon the lake of Pallajervi; and with this view we ascended the little river Pallajoki, which derives its source from it. This river is so shallow, of so little width, and twisted into so many windings, that it is with great difficulty navigated. Our embarrassments in ascending it multiplied as we proceeded: we were under the necessity, for the greater part of the course, to carry our baggage upon our backs, in order to lighten our boat. When we arrived at the lake there arose so strong a wind, that our boat was in danger of sinking before we could make the little island of Kintasari. When we gained the island, we discovered three fishermen, who had erected a kind of hut with boughs of trees, plastered over with mud, and had hung up in it a quantity of fish to dry. This little island might take up about half an hour to walk round it. Near it was another island, about a fourth part less; but this was so inconsiderable as to be without a name.

The lake was surrounded with little hills covered with reindeer moss, interspersed with woods of birch and fir. We were every where presented with the contrasted view described before, which acted so forcibly upon our imagination, that we could not but fancy ourselves upon some enchanted island. When we looked round us, we discovered nothing that resembled any country we had hitherto seen, and we seemed to be transported into a new world.

world. The sun, which shone upon us, never sunk below our horizon; and we beheld almost no colour but white intermixed with green. These objects, joined to the habitation of the fishermen, the novelty of the flowers which ornamented the isle, that of the birds which made the woods resound with their notes, all contributed to astonish our senses, that had not anticipated such extraordinary scenes. Our tent, when set up, appeared to be the palace of the island, and was as strikingly superior to the hut of the Laplanders, as the residence of sovereign princes to the dwellings of their subjects. We got into our boat on purpose to take a survey of our situation from the lake, and we pleased ourselves with the contemplation of the magnificent appearance of our new kingdom. The inside of our tent was carpetted with birchen-leaves strewed over the moss, which afforded a delicious perfume. Our fishermen seemed surprised at the splendour of our mansion, and, for the first time, had a pattern of luxury exhibited before them of which they had conceived no idea. The three days we passed on this island were spent delightfully: the lake furnished our table with the finest fish, we found plenty of game in the woods; we fished, we hunted, we bathed in the lake; we took views of the landscapes surrounding us, and collected plants and insects. We followed these several amusements without the least interruption from the musquetoes, which, fortunately, had been driven off the island by the violent wind before mentioned, which likewise had contributed to cool the air, insomuch, as to make the thermometer fall seven degrees.

We experienced additional pleasure every time the fishermen returned from their labour. Joy seemed to brighten up their countenances ; their approach was announced to us long before we saw them, by the flocks of sea swallows (*Sterna hirundo*, Lin.) which hovered in the air, seeming, by their cries, to welcome their arrival on the shore. These birds feed on the small fishes, which the fishermen cast out to them, or leave in the boats when they clear out their nets. There appeared to be an agreement and understanding betwixt the men and these birds, which depend upon the fishery for subsistence and support during this season. They came duly at the same hour in the morning, as if to inform the fishermen it was time to begin their work ; and the latter needed no other regulator. The birds set off with the boats, and served the fishers as guides in the prosecution of their calling, by hovering over those parts of the lake where the fish were collected in the largest shoals. The sight of these birds is particularly keen, so that when the fishermen heard their cries, and saw them plunging into the water, they knew those were the most proper places to cast their nets in with a probability of success ; and herein they were sure not to be deceived, but, on the contrary, never failed to take the most fish where they were directed by the birds. The fishermen had such an attachment to these swallows, that they expressed much uneasiness whenever we seemed desirous to take some of them by way of specimens. The birds were become so tame and familiar, that they would seize the small fish in the nets, and even in the boats, in the presence of the fishermen ; and

and they were so nimble in their flight, that if a fish was thrown up into the air, they would dart down upon it, and catch it in its descent before it reached the water. As the fishermen appeared to be apprehensive that they would leave them if a gun was to be fired off, I made a trial of taking them by means of a hook and line. Accordingly I contrived to bury a hook in the body of a fish, and holding the other end of the string, to throw the bait at some distance from me: but this contrivance was attended with no success; for such is their keenness of sight, that they discovered the device, and though they seized the fish, they would not gorge it when they found it was made fast to a string.

It has been already mentioned that we remained three days on this island; and we made this stay in order to prepare and take proper measures for pursuing our journey. Every thing depended on the chance of meeting with wandering Laplanders, who might assist us to cross the mountains with their rein-deer, and shew us the passages through which we might continue our route. In order to ascertain the probability of this, we sent forward one of the fishermen from off the island to engage any he might meet with, and appoint a place where we might join them. Our envoy had full power to treat, and make them such proposals as he should judge would be accepted. He set off, and promised to be back in four and twenty hours. On the second day after his departure we became uneasy; but when the third day passed without his returning, the fishermen, his comrades, grew alarmed, and were at a loss to account for this delay. Alone as he was, and crossing

an uninhabited country, he was in no danger of harm from any living creature, except the bear, which in the summer is far from being ferocious. He might, indeed, have fallen down a precipice, or lost his way in the woods, and so have been unable to recover the boat. The fishermen were preparing to set out in search of him, and we began to despair of being able to proceed any farther, when, to the great satisfaction of all of us, he made his appearance. He related to us, that having been disappointed in meeting with Laplanders on the nearest mountains, he was unwilling to go back without effecting the object of his mission, and went onwards, until at length he fell in with two families, whom he conducted with him to the banks of a rivulet called Restijoki, where he had left them waiting until we joined them.

This intelligence was the signal for our departure from the island. Our tent was taken down and packed up, and bidding adieu to our fishermen we set forward.

We soon reached the mouth of the rivulet, on the banks of which the rendezvous was appointed. We ascended it through all its windings, and were impatient to join the Laplanders, lest they should think us long in coming, and grow tired of waiting for us, for we had conceived no high opinion either of their patience or their complaisance. At length we arrived where they were. The party was composed of six men and a young girl. We found them seated under a birch-tree, on the branches of which they had hung up the provisions for the journey, which consisted of dry fish. They lay along the ground in different postures,



tures, surrounding a large fire by which they roasted their fish, which, for this purpose, was held in cleft sticks, cut from the tree which shaded them. The girl was the first who perceived us, and pointed us out to the men, who seemed to pay attention only to their cooking, so that we landed, and walked up to them, without being the least noticed or regarded. The men were clothed in a kind of smock-frock, made of the skin of the rein-deer, with a collar erect, and stiffened behind. They wore a belt about their waists, which confined their dress close to their bodies, and drew it into the form of a bag, wherein they put whatever they had occasion to carry about with them. They had pantaloons on, likewise made of rein-deer's skin, with short boots, the soles of which were wide, and stuffed out with dry grass. The girl wore pantaloons and boots of the same shape; but her clothing was of wool, and her cap, which was made of green cloth, was pointed upwards. They were most of them very short; and their most remarkable features were their small cheeks, sharp chins, and prominent cheek bones. The face of the girl was not un-handsome; she appeared to be about eighteen or nineteen years of age; her complexion was fair, with light hair approaching to a chesnut colour. Four out of the six men had black hair; from whence I conclude this to be the prevailing colour amongst the Laplanders, distinguishing them from the Finlanders, amongst whom, during the whole of my journey, I did not remark one who had hair of that colour.

The persons and dress of these Laplanders, taken altogether,

were the most filthy and disagreeable that it is possible to conceive. They held the fish they were eating in their hands, and the oil that distilled from it ran down their arms, and into the sleeves of their coats, which might be scented at the distance of some yards. The girl had rather more cleanliness in her person, and some portion of that decency which is so peculiar to her sex. This was apparent in her refusing the drink that was offered to her, and especially brandy, of which she was in reality as fond as the men. This affectation of modesty and reluctance in women to possess what they wish for, but which at the same time they apprehend would be unbecoming, appear to be qualities inherent in the sex, since this prudery is observable even among women in Lapland.

We now set about landing our baggage, and settling accounts with our honest Finlanders, who had faithfully and duly attended us from Muonionisca, and brought us safely so far on our journey. We had conceived a great regard for these worthy men; and we perceived, on parting with them, a tear of affection stealing down their cheeks, which demanded a similar acknowledgment. They took leave of us, returning their thanks, and taking us by the hand; and so strongly did we feel in our own hearts the like cordiality of sentiment, that we could not refuse them such a token of familiarity and regard. The Laplanders, notwithstanding the natural phlegm of their temper, did not remain inattentive observers of the scene that was passing before them, and could not but derive from it a favourable opinion of us, and even find their

their zeal excited to some exertion for our service, if it be possible to excite the least sentiment in minds so torpid as theirs. We were not, however, displeased that they were witnesses of the satisfaction we had given our Finlanders, and the regret they expressed on parting with us; and we hoped this example would inspire them with respect for us, and a desire to use all the activity necessary to accomplish the object for which we had engaged them.

After our Finlanders had taken their leave, and were departed, we found ourselves as it were cut off from all communication with the rest of the world; the completion of our enterprize, nay, our very existence, were at once in the hands of these Laplanders. If the continuation of our journey appeared to be impracticable, and they should forsake us, there was no means of return left to the little island, and the fishermen of Kantasari; for we had no longer a boat to convey us across the lake to that charming retreat, which we had so lately quitted, and with so much regret. But to quiet our apprehensions, we considered that these Laplanders were not a cruel people; and although they were seven in number, with the girl, we considered ourselves as a match for them, notwithstanding we only mustered four altogether, that is to say the interpreter, a servant, Colonel Skiöldebrand, and myself. The reason why they came so many in number as seven, was in order to transport our baggage; because, as they informed us, the reindeer were at this season particularly untractable and dangerous, on account of the prodigious swarms of musquetcœs, which torment them to a degree of madness: so that perhaps they might run from us and be lost altogether with our provisions and bag-

gage,

gage, a circumstance which would leave us in a very unpleasant situation. We left it to them to divide our baggage into seven parcels, one for each, including the girl, who was to be made to carry her proportion. We remarked a degree of equity in the distribution of the burthens, which impressed us with no unfavourable idea of the character of these people. We observed that they gave the lightest packets to such as appeared unequal to a heavier load. To excite in them an attention to justice, and to each other, we gave each of them a glass of brandy when they set about making the division, promising them another when it was made. On beginning their march they asked for a third, and though we feared this third glass would intoxicate them, yet we durst not displease them by a refusal. In order to induce us the more readily to comply with their request as to a third glass, they quoted a Lapland proverb as their authority for it, which says, “ Before “ a journey take a glass for the body’s sake; at setting off take “ another for courage sake.” At length we began our march, each of our Laplanders with his load of baggage, one of them taking the lead, and the rest following one by one in single file.

This was the first time during our whole journey that we had travelled in this manner, and we were wonderfully delighted with the singular appearance which our caravan made. We kept in the rear of the line of march, in order that we might see that no part of our baggage was dropt or lost, and moreover to observe the conduct of those that went before. The pleasure we had in reviewing this procession was destroyed by the intolerable stench which these filthy Laplanders left behind them, when they began

to

to perspire. It was beyond what I am able to describe; and were I ever so equal to the task, I am sure the reader would not thank me for the perusal of so ill-favoured a composition.

The degree of heat was twenty-nine in the shade, and forty-five in the sun. The ground burned our feet; and the few shrubs we met with in our way afforded us little or no shelter. We were almost suffocated with heat; and to add to our sufferings, we were under the necessity of wearing a dress of thick woollen cloth, as a security from the insects, and to cover our faces with a veil, which in a great measure prevented our drawing breath. This extraordinary degree of heat soon operated most powerfully upon our Laplanders, who had already swallowed three glasses of brandy each. They laid themselves down to rest at every short distance, and were calling out every moment for more brandy. We soon discovered that we had no longer to do with Finlanders, who are a sober, robust, active, and hardy race of people. We had now to deal with a set of wretches who cared only for fermented liquors, and were unwilling to work. In this manner we went on for six miles from the beginning of our journey; in which distance they stopped to take rest about fifty times, and as many times each of them asked for brandy. If we had not come to the resolution to deny them when they asked, we should have made no progress that day. They were dying with thirst, and the first spring they came to they dipped their heads in, like so many pigs, and drank full as large draughts. We were at very considerable trouble throughout the whole of this journey, both in making our Laplanders go on and in keeping them from straggling.

When

When one tumbled down, the whole line of march was stopped ; when the word *halt* was given, all the caravan threw itself on the ground ; and it was not without much entreaty that we could get the individuals of it to raise themselves again on their legs. We were nearly six hours in going six miles. At length we reached the borders of a small lake called Kevijervi, on the right of which a chain of mountains extends itself, and forms the boundaries of Finmark, or Norwegian Lapland, and Swedish Lapland. On the border of this lake we found two boats which were in a most shattered condition, full of leaks, with oars that were split and of unequal lengths. These boats were built by the Laplanders, and left in the place mentioned, buried in snow during the winter, and exposed to all weathers. Such were the boats in which we were now to cross this lake, about a mile over, and the only conveyance that could possibly be procured for this purpose. Two Laplanders rowed, and two more scooped out the water, which flowed in at several leaks as fast as they could throw it out : and had they ceased baling, the boats would have filled in a short space of time, and we should all have gone to the bottom. Yet, notwithstanding that we were all placed in this perilous situation, we observed, not without great indignation, that our Lapland rowers plied their oars, and pulled as leisurely, and with as much phlegmatic calmness, as if there had not been the least occasion for their exertion.

CHAPTER VI.

The Plant Angelica, accounted delicious Food by the Laplanders : its salutary Qualities—The Molestation from the Musquitoes augmented—Arrive at the river Pepojovaiv—Meet with some Lapland Fishermen, and two Children—Manners of these People; Behaviour of the Children—The Laplanders cook their Supper: their Mode of Eating—Suspicion they entertain of the supposed Emisaries of Government—The Missionaries in Lapland—Notions of the Laplanders concerning Religion and civil Institutions—Their unsocial Way of Living—Increase of Wolves in Lapland during late Years—Journey pursued in Boats, on the River Pepojovaiv.

WE gained at last the opposite banks of the lake, and without any accident. Our Laplanders quitted the boats, and we pursued our journey on foot as before. On the border of this lake, one of these people spying a certain plant, ran to gather it, and devoured it with as much avidity as if it had been the most delicious morsel in the world. It was the famous plant Angelica, the chief luxury of the North, and which is deemed a very great antiscorbutic. Being desirous of tasting it, one was given to me, and I found it so agreeable to my palate, that I soon became fonder of it than even the Laplanders themselves. I am fully

convinced that I owe to this plant the uninterrupted good health which I enjoyed during all the time I was in those parts; where we had nothing else for our subsistence than dried or salted fish, the dried flesh of the reindeer, hard cheese, biscuit, and brandy; all of them heating and insalubrious aliments. The angelica was the only thing that was fresh, and the only vegetable that we had at our table. My companion, who had no relish for this plant, was often troubled with pains in his stomach, and with indigestion.

Though it was now drawing towards midnight, the torment we suffered from the musquetoes, instead of being abated was increased. The night was perfectly calm, and the insects attracted by the effluvia of our Laplanders, pursued us in our course, surrounded us, and involved us as in a cloud. After travelling three miles over the reindeer moss, and through stunted shrubs, we arrived greatly fatigued at the banks of the river Pe-pojovaivi, where we found a fire with some Lapland fishermen sitting by it, and two children about five or six years of age. We began to make preparations for passing the night here, and the Laplanders set about cooking their supper. The musquetoes this night annoyed us so terribly, that it was not without the utmost difficulty we were able to swallow a morsel of victuals. There was not so much as a breath of wind: the column of smoke that issued from the fire mounted straight upward in the atmosphere, so that we were deprived of the benefit of fumigation, and of taking what food we had, under the protection of a

cloud

cloud of smoke. We were obliged to eat with gloves on ; and at every morsel we put into our mouths we were under the necessity of drawing aside the veils that covered our faces, very gently and with great circumspection, for fear of the insects entering along with our refreshment. In spite of all our precautions the musquetoes were sometimes swallowed together with our viands. In order to be quit of so disgusting a sauce, we were compelled at each morsel we put into our mouths, to draw near the fire, and thrust our heads into the rising column of smoke. We chose rather to encounter all the bad effects of the smoke, and to be half suffocated, than to swallow those pestiferous animals.

In order to remedy the inconvenience occasioned by the defect of a breeze, which might waft the smoke horizontally, and thus make us partakers of its kind influence, we bethought us of the following contrivance : we kindled three fires around us, in the midst of which we were glad to remain, notwithstanding the excessive heat. I cannot at this moment account to myself why we did not think of setting up our tent, under which we certainly should have enjoyed greater comfort, and have been less tormented by the insects. Perhaps it was, that we did not expect to remain long in this place, and because the erection of our tent always took up some time ; or it might be too carefully packed up, or perhaps we had not the means at hand of erecting it. It often happens that a person does things for which he afterwards can assign no direct reason, though at the time he may have had satisfactory grounds for his proceedings.

After supper we employed ourselves in observing all the manners and actions of the Laplanders, in order to form an idea of their mode of living. With this view we proposed several questions to them. The two children were chubby, robust, and hearty. They did not seem to be at all struck with surprise or awe at our appearance, nor were they in the least discomposed by our presence, or put out of their usual way. They went to the river and fetched water, which they would sometimes throw on our shoes, and sometimes ~~in~~ our baggage. They did some damage or other to every thing they laid their hands on, and deranged whatever was within their reach; yet the Laplanders took no more notice of the children's behaviour, than if they had not existed. They saw all their motions; they suffered all the mischief they did with the most perfect indifference. They cared for nothing. The children seemed to be the sovereigns of the place. The Laplanders never said so much as one word to them of any kind. They never observed that it was not well done to throw water on the shoes of strangers, or gave them any lessons respecting good manners and propriety of conduct. These, indeed, are terms and ideas with which the Laplanders are wholly unacquainted; and their only mode of training up their children is not to train them at all.

In the mean time, while the children were thus engaged in doing all the mischief in their power, the old Laplanders were busied in cooking their supper, which consisted of various fish cut into pieces and boiled in a pot, together with some dried fat of the

the reindeer and a little meal : the whole formed a curious kind of mess. While the pot was still on the fire, all the Laplanders sat around it, each with a spoon in his hand, for the purpose of tasting when the soup was ready : when sufficiently boiled, they began to partake of the mess out of the same pot altogether. When any one had taken as much as satisfied him, he fell asleep, and when he awoke he immediately began to eat again while others slept ; then these would awake, and again eat, while the former clapsed into his slumber ; and thus they alternately eat and slept till they were satisfied with the one, and incapable of taking more of the other. There did not appear to be any kind of rule or order among those people ; no beginning of any thing, and no end. Their only regulator and guide seemed to be appetite and instinct.

When they were not occupied with either eating or sleeping, they smoked tobacco. With one or two who preferred smoking to sleeping we had an opportunity of holding some conversation, in the course of which they asked us some questions. They enquired if any one of us was the king, or a son of the king, or a commissary of the king ? They desired to know, why we came into their country ? and what we were going to do there ? I discovered that these people entertained suspicions that we were emissaries from government, sent to spy their situation and condition, their wealth, and their conduct. From a great deal of jargon in a language, but little of which was intelligible even to our interpreter, we found out their object was to convince us of their

their great poverty. The answers they made to our questions were not so frank and plain as might have been expected from such simpletons. The passions which so often make men of sense act like fools, sometimes give art and address to the most stupid ; and there is none of those passions so much adapted to produce effects of this kind as selfishness, and an anxious interest to protect property.

When the kings of the North, animated by a spirit of religion and piety, sent missionaries into those forlorn regions to preach the Gospel and propagate the Christian religion, the missionaries did not only make the poor natives pay the expences of their journey, but also gave them to understand that they were to be remunerated for their trouble. That wandering people had hitherto lived without priests, and without any kind of burthen ; in fact, because they were too poor to pay to the exigencies of state. They worshipped in their own way, just how and when they pleased, a number of gods, who cost them nothing, except now and then a sacrifice, which they themselves ate up, and of which they left nothing to their deities but the bones and horns.

At first, it may be presumed, they were not a little chagrined at being called on to share their wealth with strangers, whom they conceived they could do very well without. Being weak from indolence and idleness, as well as natural constitution, dispersed, disunited by their manner of life, attached only to their herds, and incapable of combining among themselves, in order to form any plan of opposition and resistance, they submissively, and without

out reluctance, believed whatever the priests deemed proper to tell them, and tamely and indolently gave up a part of their good things in order to preserve the rest. The priests, on the other hand, followed the same principles in Lapland, no doubt, as in other countries, and were not more zealously concerned for the salvation of souls, than careful that no one should go without the benefit of their instructions, who possessed some hundreds of reindeer. The poor ignorant Laplanders paid with tolerable patience the contributions required by the missionaries, who promised them happiness in another world, which probably, according to their limited conceptions, would consist in drinking brandy from morning to night. Nothing opens men's eyes so effectually as their interests ; and on what account, or by what rule of right or reason, they are compelled to share their property with the commissaries of government, from whose police, laws, and justice, they derived no manner of advantage, is a matter of which they have no conception. In fact, they look upon rulers and their commissaries in no other light than that of robbers, who like to live in ease and luxury, at the expence of others, without taking the trouble, like themselves, of following the reindeer, or even being at the pains either of fishing or hunting. They have no idea of the utility of visitors from whom they derive no protection or benefit, and whom they consider merely as men who eat and drink, and consume the substance of hundreds of other men. Such are the notions entertained by the true, or vagabond Laplanders, who remain in their native deserts, and who, shut up in their mountains,

mountains, never approach near enough to civilized societies to acquire any ideas of their form and constitution. Free by nature, their manner of living exempts them from the necessity of laws. They dwell in a country which cannot be inhabited by any other race of mortals. They feed their rein-deer with a vegetable rejected by every other animal. Their only society consists in the union of a few families drawn together partly by common wants, and partly by social affection : and when two such families, with their herds, chance to meet on the same spot, there is land enough for the one to accost the other in the words of Abraham to Lot:—" If thou wilt take the left hand, then I will go to the " right ; or if thou depart to the right hand, then I will go to " the left."

It was not without extreme difficulty that we were able to persuade our Laplanders that we were neither kings nor commissioners, nor priests, but only private individuals who were travelling from mere curiosity. The principle of curiosity, which exists only in cultivated minds, and which is derived either from self-interest, in search of something that may be advantageous, or from the pride of knowing more than other men, or from a desire of comparing what is already known with some object or objects not yet known—this principle is obviously too abstruse, and can in no wise enter into the head of a roving Laplander. During the whole of our intercourse with these people, we could never discover among them the smallest sign of any sentiment of religion or devotion. They never offered up any prayer to the Deity when

when they went to eat, nor when they retired to rest, nor at rising in the morning.

Exactly at the hour of midnight, when the sun was elevated about two diameters above the horizon, we had an inclination to try the experiment, whether we could not light our pipes by means of a burning-glass. The attempt succeeded completely. At this phenomenon the Laplanders shewed greater emotion and wonder than they had yet done on any other occasion. We had a notion that they began to take us for ~~forcerers~~; and under this idea we put some questions to them on the subject of sorcery, of which we had heard so much in all the accounts of Lapland. We asked them, whether they believed that there were any sorcerers in their country? They said, no: and that they did not care whether there were any or not. To all our queries they answered with an air of extreme indifference, and in a manner that seemed to indicate that they were sick of our insipid conversation. We soon perceived that all our questions made no other impression on their minds than to awaken jealousy, and to put them more and more on their guard; and to convince them that we were commissaries sent amongst them by government. When we enquired of them where their rein-deer were, and how many they had, they replied, that they were very poor; they had formerly twenty-four, but that only seven remained, all the rest having been devoured by the wolf. If we had not been aware that the preceding year had been a dreadful one to the Laplanders, by reason of the immense quantities of wolves that poured

in amongst them and devoured their stock, we should have been induced to suppose that the account they gave of the present small number of their rein-deer, was intended to convince us of their poverty, and how unable they were to bear any contribution that might be demanded. But intelligence of their disasters in that terrible year had reached as far as Uleåborg ; and it was even urged by our good friends there as a reason why we should give up all thoughts of our projected journey. They said, that as more than a third of the rein-deer had been destroyed by the wolves, it would not be an easy matter for the Laplanders to furnish a sufficient number of these animals for conveying us on, in our long and hazardous expedition.

It is a singular phenomenon, that the number of wolves in Lapland has increased very sensibly every year since the commencement of the last war in Finland. The Laplanders believe that this war chased away the wolves from Finland, and forced them to take refuge in the north ; just in the same manner, perhaps, as the present inhabitants of Finland, in their progress westward from Asia, drove the old Fins into the wilderness, in which they now sojourn. This reason, however, seems not so well founded as to give any solid satisfaction. We know from experience that the wolves are disposed to follow the course of war, and to feed on the victims of our broils and contests, rather than to shun and fly away from them. I must therefore refer the increase of wolves in Lapland to some unknown cause, which I do not pretend to penetrate.

We now prepared for our journey to Kautokieno, under the consolatory reflection that we should henceforth escape the obstacles and fatigues we had hitherto met with from the adverse currents of the rivers. This was the first time we had seen any river, whose waters were in their progress to lose themselves in the immense extent of the Frozen Ocean. If we had been opposed by such cataracts as those of Muonio, it would, doubtless, have been impossible for us to have proceeded any farther. But happily the dangers to be encountered in the cataracts of the river of Pepojovaivi, were not unproportioned to the want of vigour and skill of the Laplanders, who were to be our attendants. Those feeble, awkward, and helpless beings, were embarrassed and at a stand on the least difficulty; and every stone to them seemed a mountain. The state of their boats was deplorable; their oars were disproportioned to one another, and without any regular form. They were no other than sticks of wood cut and hacked into something like an oar, in the most negligent manner. Laziness and stupidity were prominent in all the Laplanders did, in all that appertained to them. The only things that they were able actively to perform, were to keep up an everlasting chatter, to smoke their pipes, to chew tobacco, and to drink brandy.

CHAPTER VII.

Passage on the River Pepojovaivi—Manner of Fishing used by the Laplanders—The River Pepojovaivi forming several Lakes during its Course, and emptying itself into the River Alten, near Kautokeino—Immense Quantity of Fish in those Lakes—Sport of Shooting on the River—Different Species of Birds—Some farther Characteristics of the wandering Laplanders—Arrival at Kautokeino—Schoolmaster of this Place—Laplandish Singing—The Music of this Country.

WHEN we embarked on the Pepojovaivi, we left the young woman, who was the daughter of one of our Laplanders, on the banks of the river. We now proceeded with our six men, which were in truth more than we had occasion for; but they were desirous individually to get some money with very little trouble. We had two boats, with three Laplanders in each, who had distributed their offices in the following manner: one of them rowed, another managed the helm, and a third scooped out the water that entered into the boat incessantly. Instead of going straight down the river, they made a turn without saying a word to us, in order to look at some nets which they had spread a day or two before. We perceived this deviation, when, instead of following

following the course of the Pepojovaivi, they made up against the current of a small and smooth river, which falls into the former. They would give no farther account of this change in their movement, than by saying that they were doing what was right, and that they would conduct us in good time to Kautokeino according to our desire. As we had not any tolerable maps of this part of Lapland, and were totally unacquainted with the rivers or lakes that we might have to pass, we could not make any vigorous opposition to what our guides intended, and therefore judged it expedient to take no notice of what they did for some time, but wait and see the result of this new circumstance. It was not long before we discovered that their object was to draw the nets and carry off all the fish they could find. These nets were torn in so many places, that the fishes might make their escape with little difficulty; but the quantity of them was so great, that some were found in every part of the net that was entire. The manner of fishing in Lapland is this: they have their nets spread, and always standing in the water; they repair to them and draw them in whenever they want fish, which they dry in the air, and by the heat of the sun. Nature has done every thing for those people; and in proportion to her profuse bounty is their abominable indolence. The fishermen of the isle of Kintasari were very different in their habits and dispositions from those of Pepojovaivi. All their apparatus for fishing was in the most excellent order: their boats were sound, their nets whole and faultless, and they drew them when they cast them. But the Kintasari fishers were not erratic

erratic but fixed Laplanders, or rather a Finnish colony established in Lapland. These inhabitants of Kintasari preserve all the original boldness of character, force and activity, by which the Fins are distinguished; whereas the unsettled and wandering Laplanders are remarkable for sloth and dirt.

Having returned to the river Pepojovaivi, we fell down by that stream to Kautokeino, where it empties itself into the river Alten, after a course of forty English miles from the place where we set out. The river Pepojovaivi is every where intercepted by lakes, or, more properly speaking, it often spreads and makes lakes, which, being fringed with birch and fir-trees, offered the most pleasing views, and rendered our voyage very interesting and agreeable. We were astonished at the incredible quantity of fishes with which those lakes abound, and which leap every instant to catch insects above the surface of the water. Our Laplanders themselves were surprised at their abundance, and agreed, on their return, to come there and let down their torn and ragged nets. The cataracts of the river Pepojovaivi were not at all considerable, nor were they in the least dangerous. Our good Finlanders, and above all our pilot Simon of Kollare, would not have thought it worth while to mention such a voyage: but it was a very arduous undertaking for our Laplanders, who found themselves under embarrassments at every turn. Being inured to the navigation of cataracts, we could encounter their difficulties and dangers without emotion, and were of course more fitted to extricate our company out of any untoward circumstance than the Laplanders, who,
without

without our assistance, would probably on many occasions have been disheartened. They had not the least knowledge of the depth of a current from the appearance of the surface, and of two courses presented to their option, they were always sure to chuse the worst and the shallowest. Through their awkwardness and stupidity, we were obliged to pass a considerable part of our journey along the river on foot. I have not a doubt but our Simon, through the cataracts of Muonio, would have discovered with a glance of his penetrating eye, some place where the boats might have passed in safety. Two of our Laplanders came out of their respective boats, and in each one remained. One of those who landed drew the boat along by means of a rope made of the bark of the birch-tree ; the other, with a rope made of the same materials, checked and moderated its motion when the current was too rapid. If at any time the Laplanders who were on foot on the banks of the river, chanced to spy any plant of the angelica, they would immediately run to gather it ; and having their hands full of this herb, they would rather lose hold of the ropes and let the boats strike on rocks, than quit the delicious vegetable. Sometimes when we were in the boat, they would chatter among themselves at such a rate, or be immersed so profoundly in the pleasures of the pipe, that they took no manner of notice of approaching dangers; to which, of course, we were obliged to be ourselves attentive : and even when we did give them warning, they would rather let the boats drive against any obstacle, than interrupt or discompose the business of eating angelica, or smoking tobacco.

tobacco. It happened once that having taken a false direction, or course, on a part of the river where it was rough and shallow, they were so entangled among large stones, as not to be able to move. On this the Laplander who plied the oars rose up from the bench on which he sat, and by the serious and decided air he put on, we judged that his intention could be no less than to make some powerful effort for our extrication from the present embarrassment: He began, however, immediately to loosen a part of his dress, and was so unpolite as to give way to a very pressing want of nature in our presence. I will not tire my readers at present with any farther details on the manners and habits of those people. What has been already mentioned may suffice to give a tolerably just idea of their character and deportment. We were every instant on the point of losing all patience with them. But for want of geographical information, and from the need we had of them, we were, in a great measure, under their power, and therefore obliged to put up with all their stupidity, laziness, and beastliness.

Before we come to Kautokeino, I cannot forbear giving some account of the pleasant amusement of the chase, which we enjoyed on this river. Our Laplanders had taken a dog with them, and as the animal was not admitted into one of the boats, he was obliged to follow us as well as he could. This poor creature, by his actions, and the means he used for keeping up with us, shewed a great deal more activity, sense and contrivance than the human beings of this country. When two ways lay before him, he never failed to make choice of the best: he had lakes to cross, islands to

traverse,

traverse, and tracks to chuse, and during the whole of the route was under a constant necessity of observing, comparing, and deciding; three operations of the mind with which the Laplanders were but little acquainted. In the course of his running along the banks of the river, through shrubs and brushwood, he started some game, which, in those parts, during the summer season, is very plentiful. We shot some ducks of a species peculiar to those regions, the *anas nigra* of Linnaeus, some geese (*anas albifrons*, Lin.) and a great number of grouse, which are here very common, and which, rising all of a sudden very near the boats, present an excellent mark to the sportsman.

The river of Pepojovaivi does not pass close to the village of Kautokeino, but at the distance of about a mile. That mile we were obliged to walk on foot, and to have our luggage carried by land. In walking over this space, I fell in with some birds, particularly the curlew (*scolopax arquata*, Lin.) which, to my astonishment, I found in this country very fearless and familiar, although in other parts, and even at Uleåborg, it is not to be approached without the greatest difficulty. I killed two of these birds without turning aside from my path: I brought down also some plover.

When we arrived at Kautokeino, which was about an hour after midnight, we were surprised to find the whole village in a state of alarm. All the women were at the doors of their houses in their shifts, and the men in the streets or rather lanes. Their terror was occasioned by the reports of our fowling pieces; and it was

not without much trouble that our interpreter succeeded in quieting their fears.

Among the Laplanders there was one whom they honoured with the title of school-master. This appellation gave me a high idea of Kautokeino ; and I expected to meet with another parson, like the one of Muonionisca, who should come to taste our brandy, and speak a little Latin, mixed with the Lapponic : but the minister of Kautokeino happened at this time to be absent. He had gone, I understood, into Norway, to tarry some time with his relations. The ministers, or missionaries, do not usually remain in Lapland during the summer months. We took possession of the priest's house, or rather chamber, for it consisted only of one apartment. Being thus lodged, and somewhat recovered from our fatigues, we were in a condition better qualified to become acquainted with the village of Kautokeino, where we recognised ourselves as subject to the laws of Denmark.

The first thing we did was to pay our Lapland attendants. But before we gave them their dismission, we were determined to make an experiment of their talents in another species of knowledge than any in which we had yet tried them. We desired to hear them sing, being anxious to have a specimen of their skill in music. I attempted several times, both by the power of money and of brandy, to make the pastoral Laplander utter his notes, that I might form to myself, if possible, some idea of their music : but the utmost I could accomplish was to extort from them some hideous cries, during the continuance of which I was sometimes obliged

obliged to stop my ears with my fingers. It is scarcely credible, though it is perfectly true, that the mountain and wandering Laplanders have not the least idea of any thing connected with harmony, and that they are absolutely incapable of an enjoyment which nature has not entirely forbidden to any other tribe or nation, as far as I have been informed. Artificial music appears to be wholly banished from those forlorn and solitary districts. The only musical accents to be heard in Lapland are those which nature has indiscriminately bestowed on all other countries, without any regard to man, whose pride induces him to believe that every thing in the world is made for him alone. The only melody to be heard in Lapland is that with which the birds make the woods re-echo ; that of the rivulets rustling over their pebbly beds ; that of the winds resounding amidst the branches of trees and the deep gloom of forests ; and lastly, that of the majestic fall of rivers over rugged rocks, where the waters break with a crashing noise, and send up their foam to the clouds. But that I may not leave my reader altogether without an idea of Laplandish singing, such as it is, or rather of the vociferation of the wandering Laplanders, I shall present them with two specimens, which I find preserved in my portfolio, among the various notifications of my journey. I put them on paper, while those poor creatures were straining their throats, and the music is to be seen in the Appendix. They were taken down without any regard to time or measure, because they had none ; nor are they so long by a third part as the original songs, because there was nothing but a continued repetition of

the same notes. The Laplanders, after exhausting their breath, persevered in uttering the same cry in a kind of fainting or fading voice, as long as there was a particle of air in their lungs. Their music, without meaning and without measure, time or rythmus, was terminated only by the total waste of breath ; and the length of the song depended entirely on the largeness of the stomach, and the strength of the lungs. With all my knowledge of the musical art, I was quite reduced to a nonplus amidst those musicians of Lapland ; and I envied more than ever the skill of the Abbé Renauld ; an advantage which would have stood me in great stead in the circumstances in which I was then placed.*

While the Laplanders were uttering cries in the manner just described, they articulated certain words, which induced me to ask our interpreter their meaning, and whether they were any verses or fragments of poetry. But I soon learnt that their genius for poetry did not transcend their turn for music. The words they pronounced in their vociferation were only repetitions of the same expressions over and over again. For example, “ A “ good journey, my good gentlemen—gentlemen—gentlemen—“ gentlemen—a good journey—journey—journey—my good gen-“ tlemen—gentlemen—a good journey—journey—journey—jour-“ ney,” &c. and so on as long as they were able to fetch any breath : when this was exhausted, the song was ended.

* The Abbé, in a note under the article *Swan*, in that part of Buffon’s work which treats of birds, assures us very gravely, *que les cris des cygnes est soumis à un rythme constant et réglé à la mesure à deux tems.* Œuvres de Buffon, vol. xxiv. page 25. Edition de Paris, 1783.

CHAPTER VIII.

Situation of Kautokeino—Boundary between the Swedish and Danish Territories—An Instance of just Reasoning on a political Topic—Baron Hermelin's Maps of Sweden, Finland, and Lapland—Difficulty of obtaining good Maps of those Countries: those which exist are far from being accurate—Diversity of Names given to the same Places, and confusion occasioned by this Circumstance—Anecdotes of the School-master of Kautokeino—District or Parish of Kautokeino—Population and Inhabitants—Wandering Laplanders, and those that have fixed Habitations—Their Mode of Life—Chase of the wild Rein-deer—Annual Fair at Kautokeino, and Traffic carried on—Cattle and Sheep—Low Estimation in which the latter are held—Departure from Kautokeino—State of the Weather and the Thermometer—Journey pursued in Boats—The River Alten: beautiful Scenery—Musquitoes.

TILL our arrival, the village of Kautokeino was considered as wholly insulated in the summer season, and inaccessible to travellers. The surrounding district is described in the Danish book of geography as a country consisting of mountains, separated from each other by dangerous and impassable morasses. It was this

this circumstance that occasioned the alarm at the report of our guns. The inhabitants could not conceive from what cause, or from what quarter the thundering noise proceeded, as it could not occur to them that they might receive a visit from any curious strangers.

The village of Kautokeino is inhabited by four families and a priest, and it has a church. By the line of frontier agreed upon in 1751, between Sweden and Denmark, Kautokeino was included within the dominions of the latter. On looking at the map one is surprised to find here the boundary between these two kingdoms; instead of its following the ridge of mountains, which forms a natural separation to the south and the north in that corner of Europe. By that arrangement the territory of Denmark turns toward the south, and takes in an angle of Lapland, which ought naturally to belong to Sweden. We did not fail to make enquiry into the cause of this singular deviation from apparent reason and justness, and we flattered ourselves that we had traced it to a secret of state, being informed that it was the effect of bribery and corruption. The Swedish commissary, we were told, had been induced to make a cession of the angle in question by the power of Danish gold; and numerous extravagant anecdotes were mentioned of this person, who was represented as much addicted both to wine and to women; that care was taken to throw in the way of this man of pleasure the whole luxury of Lapland; and that he was overcome by the manifold temptations held out to him, and agreed to the division as before stated.

Romantic as this account may appear, we were not backward to give it credit. My companion particularly, who was a Swedish officer, assented to it most readily, like a good patriot, who discovered with indignation a fraud committed against the interests of his country. We made a thousand political reflections on the different means and arts of corruption, and on the great value set by governments on trifling matters: we thought that possibly the two powers had left this small territory in an unsettled state, in order that they might not want a pretence, whenever they should chuse to come to a rupture. If I might have been permitted to do justice to our political talents and acute investigation, I should have said that we displayed great knowledge as well as eloquence on the present subject. But alas! the fact was, that all we had heard, and what had given rise to our *sage* observations, was a mere fable. The true cause of the eccentricity noticed in the line of demarcation, was a thing perfectly natural, and in conformity with the treaty of 1751, between the courts of Stockholm and Copenhagen, by which it was settled that the boundary should be fixed by the sources of rivers; that is to say, that all that tract of country of which the rivers run into the Frozen Ocean, should belong to Denmark: and on the other hand, all that should be held as Swedish Lapland, of which the rivers fall into the gulf of Bothnia. More than a year after my journey to Lapland, I became acquainted at Drontheim, the capital of the northern parts of Norway, with the Danish commissary who had been employed in this business, and from him I learned the true principle or basis

on which the division of the territory was founded. He laughed very heartily at the fabulous account which I recited to him of that matter.

I have already observed, that we no longer derived any benefit from maps, but were left wholly to our own resources. The best maps of Sweden are those published by Baron Hermelin: and when it is considered that these have been executed at the expence, and by the capacity and industry of an individual, it is impossible to withhold the tribute of praise due to the distinguished zeal of his patriotism. Baron Hermelin employs the greatest part of his yearly income, which is very considerable, in the promotion of the geography, the natural history, and a knowledge of the political state of Sweden. He sends young men of genius to different parts of the kingdom to take geographical surveys, to try experiments, make observations in mineralogy, and to collect various statistical accounts. From their sketches of particular districts he forms his maps of the different divisions of Sweden. It is however to be observed, that these geographicall delineations, though wonderfully exact for the work of an individual, derive their distinction and merit only from a comparison with others less correct. In fact, they may be regarded as the only maps of Sweden that have yet been published; and what is more, they have been completed solely at that gentleman's own expence, and without any assistance from government. Sweden, Finland, and Lapland, have not yet been surveyed with that correctness which prevails in the geographical representations of France, of Britain, and other countries;

countries ; every district and corner of which have been measured, and drawn with the greatest accuracy and precision. Baron Hermelin's maps are not composed with all the rigour of trigonometry ; they are formed from views by the eye, in the same manner as the sketches of ordinary surveyors or draughtsmen, who ascend to the top of a particular mountain, and thence obtain a prospect of the circumjacent country from which they make their drawings. Besides this, the natives are consulted, who furnish accounts of different matters within their knowledge, and particularly of the names of hills, rivers, towns, and other objects. Lapland, if we comprehend under it all those parts so named in the wide extent belonging to Sweden, Denmark, and Russia, is a country of such immense space, that it would be too great an enterprize to attempt making an accurate measurement of even the frontiers of its different districts. Moreover, the summer in that climate is so short, the fatigue of penetrating through its morasses and surmounting other obstacles so great, and the operations of a just trigonometrical survey would require such a length of time and number of persons, that there is but little hope of its being soon, or ever accomplished. As to the winter season, the most proper for travelling in those northern and uncultivated countries, it involves the disadvantage of obscurity and darkness ; and the snow every where covering the surface of the earth, rivers, and lakes, to the depth of several yards, and presenting in all places an uniformity of appearance, makes it impossible for the geographer to discriminate land from water.

With regard to the names of places in Lapland, these will never be fixed while Laplanders remain in the unsettled state of a pastoral and wandering people. Those that have permanent habitations are wholly unacquainted with the names of mountains, rivers, brooks, and lakes at any great distance, to which there is little if any resort. The Laplanders who know the names of these objects, are of the pastoral or erratic tribes. But here another difficulty occurs. Various families of these Laplanders associate together, and thus wander from place to place : and as the intercourse of these hordes with one another is but trifling, and of a very transient nature, the language of each is marked by such shades of variety, that it can scarcely be said with propriety that there is one Lapland tongue, common to all. Hence it happens that the same places have very dissimilar denominations, and that a map of any district under the guidance of one Lapland shepherd, would not be recognized and understood by a traveller who had drawn a plan of the same tract, under the conduct and information of another. An instance of this diversity of names, and the inconvenience that naturally thence arises, I experienced myself in my progress from Pallojervi to Kautokeino. On my arrival at this last village, I was influenced to look over my names of places, and the little map I had drawn ; all which I shewed to an inhabitant of Kautokeino. I found that the Laplander who attended us, and from whose account I had projected my geographical sketch, had called the places by names totally different from those by which the same objects were known to the people of Kautokeino.

Among the Laplanders of Kautokeino was one, as I have mentioned, who bore the specious title of school-master. This appellation struck me very much ; for I had conceived that I was in a place far removed from any school, or any institution for the purpose of instruction. The name of school-master was as great a subject of pride to this Laplander, as a red or blue ribband may be to any one in the refined parts of Europe. He was, doubtless, as much gratified by the appellation of school-master, as any one in our state of society may be by his rank of nobility, or other eminent distinction. This school-master, both in his personal appearance and manners, was as complete a Laplander as his neighbours around him, except that from some defective conformation of nature, there was something very singular and ludicrous in his mode of walking, his feet being always turned out into what is called by dancing-masters the first position.

Having passed the frontiers of Lapland,* and continued some time in Norway, he had learned the Danish, or rather the Norwegian language : and his knowledge of this opened an employment to him the most singular and droll in its nature of any that ever fell under my observation in any country. The priest, or minister, being wholly unacquainted with the Lapponian tongue, cannot convey his sentiments to his audience, who know not any other. To remedy this inconvenience, the school-master takes his

* Norwegian Lapland is named by the Danes and Norwegians *Finmark*. I shall still, however, call it Lapland, in order not to confound the inhabitants of this country with those of Finland ; for both assume the appellation of Finlanders.

station beneath the pulpit, and when the minister has pronounced one sentence of his sermon he stops, and the school-master repeats it to the congregation, in the language of Lapland. The effect which the eloquence of the preacher, thus interrupted and mutilated, must have on his audience, it is not difficult to conceive. I confess I would have given, I know not how much, to have heard this Laplander, and known what kind of translation he made of the Danish missionary's sermons. As for the minister, who understood not a word of what the school-master said in his name to the people, he presumed it was all right, and went on without hesitation.

As it is the interest of Denmark to extend its language over those countries as much as possible, a school-master was appointed at Kautokeino for teaching Danish to his neighbours, and as many as he could draw together to receive his instructions. It would appear that this school-master had not greatly improved his manners and address, from his travels into Norway, if we were to judge from his matrimonial connection. His wife was only three feet and a half high, and indisputably the ugliest creature beyond the polar circle. But on the other hand it should seem, that he had acquired from his polished neighbours of Norway the art of insinuation, and some knowledge in the science of gallantry. He was able to gain the acquaintance and attachment of a young girl in the parish, who in a short time thereafter found herself in a condition that discovered how much she had profited by the instructions of the school-master; a circumstance which placed this public functionary in an awkward situation with regard both to

the

the relations of the damscl, and his own little wife. Those incidents, however, are not regarded in the same serious light beyond, as on this side the polar circle. The matter was very amicably settled : the child died soon after it was born, and the schoolmaster's wife felt more pride in her husband's successful courtship, than mortification at his infidelity.

Before we leave Kautokeino, it may not be amiss to offer, for the amusement of my readers, a few geographical and statistical observations on this part of the country. In the whole of the district or parish of Kautokeino, which is twenty-five Norwegian miles in length, and twelve in breadth,* there are but two places occupied by settled Laplanders, which amount together to no more than twelve families. The rest are all of the shepherd, or vagrant kind, who cannot be accurately numbered, because they are constantly in motion, and not attached to any particular spot. In 1756 they reckoned ninety distinct families ; but it is possible that some of these families may also have been counted among those of other districts. These wandering Laplanders inhabit during winter the mountainous tracts, and move from place to place with their tents, and herds of reindeer ; but in summer they draw towards the coast for the benefit of fishing. At Kautokeino there are some very fine fields of meadow and arable land ; the latter of which yield as much oats and barley as supplies the inhabitants for six months. Horses they have none : all journeys are performed on foot or in boats in summer, and during winter,

* A Norwegian mile is about eight English miles.

in sledges drawn by rein-deer. What hay they possess serves as provender for their cows; and the corn they obtain is converted into flour for their own use, which, through long habit, is become so necessary an article of their subsistence, that they are miserable if they have it not all the year round. From fishing and the chase they derive as much resource as they possibly can. A people enured to a roving and hazardous kind of life, prefer to the laborious pursuits of agriculture, the chances of fishing and the chase. It would not be difficult for the few families of Kautokeino to raise grain sufficient for their wants: but they chuse rather to fish, and hunt wild rein-deer, than to undergo the wearisome toils of husbandry. They exchange for grain what fish they can spare, or barter for it the skins of bears or other animals which they may happen to kill. It is, however, by no means to be wondered at, that this should be so, when we consider that fish are so abundant in the rivers as to make the catching of them not a business of doubtful speculation, but of the utmost certainty; and also, that if any one kill a bear, he gains more by the skin than he would by the cultivation of half an acre of land, over and above the luxury of feasting upon the flesh of this animal, which is esteemed very delicious.

The method of hunting the bear is the same here as in Finland, but that of hunting the rein-deer is attended with excessive fatigue, and to be performed only by a Laplander. The wild rein-deer, which scorn to live in a herd, but remain in a solitary state among the woods and mountains, possess a nicety and acuteness of caution

caution that nothing can equal. When a Laplander perceives one of those animals at the distance of about half an English mile, he takes a circuit to the windward; coming nearer and nearer to it, creeping on his hands and feet, until he comes within gun-shot. I have been assured by a Laplander, that he has been obliged to creep in this manner for five miles, through shrubs and moss, in order to reach the most convenient spot for taking aim at his prey.

In the small village of Kautokeino, there is in the month of February an annual fair, which is frequented by the neighbouring Laplanders and the merchants from Torneå, who come thither for the purpose of purchasing reindeer skins, furs, and other articles. In those fairs the medium of trade is barter. The Laplanders give the skins of reindeer, foxes, wolves, and bears, with gloves and shoes, or rather short boots, in exchange for coarse flannels, but above all for brandy, tobacco, meal, and salt.

They have a few cows and sheep, which in some degree supply them with milk and wool. For fodder to their cows, when they have not hay enough, they gather the moss that the reindeer feeds upon, and which the cows, for want of better nourishment are glad to live upon. On the adjacent mountains there is a kind of moss which the sheep will eat, and even seem to like. As sheep do not form any article of barter or commerce, they are to be purchased at a very low price. We bought some for our kitchen, at the rate of eighteen pence English a-piece.

The people in those parts are neither ignorant of the use of money,

money, nor exempt from a passion for being possessed of it. Their fair seems to have given them an idea of taking advantage of circumstances whenever they may occur. Of this we had a proof when we began to make preparations for pursuing our journey ; they demanded nearly half a-crown a day for each man that was to attend us, which was an enormous sum for that country, and bore peculiarly hard upon us, since we had occasion for five, and afterwards for seven men, besides the interpreter and our own servant. Our interpreter attempted to demonstrate, that what they asked was extravagant and unreasonable ; but they would not be moved by his arguments, but replied, that the present was the season for fishing, by which they should gain more than in our service ; which perhaps might be true. They seemed also to be aware that, as travellers are not frequent in their country, if any one journeyed there in a season when there was neither a fair, nor any other particular business to attend, he must either have plenty of money himself, or be commissioned by government to examine and report the state of the country, and consequently be paid by the king. Such I conceive was their reasoning, and there was no remedy against it ; we had no other people but these that we could apply to, and thence we were compelled to submit to their terms. I consoled myself with the consideration, that I would rather pay double their demand than return to Ulcåborg, and give up the intended journey. We now gave orders for our boats to be got ready, and all our baggage to be stowed into them. We set out from Kautokino on the ninth of July, in the fairest weather imaginable,

imaginable, and under a temperature of climate approaching to that of Italy. The thermometer of Celsius indicated the 25th degree of heat at mid-day in the shade ; exposed to the sun it rose to forty ; on the water it subsided to nineteen. The women of the village accompanied their husbands to the side of the river, and bade us farewell in the most affectionate manner. The voyage we were about to undertake was long and painful, and which none of the people had ever performed in summer. Our departure deprived the village of two-thirds of its population, and rendered for a time five-eighths of the married women widows. We were followed by their looks till the winding of the river intercepted their view ; nor was the school-master's wife, so little and so ugly, the least constant or ardent in demonstrations of sensibility and regret at parting with such dear visitors and friends. Our boats were just of a size sufficient to contain the whole of our company, with our luggage and tent. We were in all nine, distributed in two boats, which could not have carried one person more without the danger of being overset, or of sinking to the bottom of the water.

The river of Alten we found one of the most beautiful we had yet viewed in the course of our travels. It is at its commencement a continued succession of lakes of different size and shapes, and interspersed with islets that are covered with the birch-tree. These presented a scenery of landscape, which far from having a wild and harsh appearance, was such as might befit a gentler climate. Those lakes inspired us with an inclination for bathing :

their waters were clear as crystal, and their edges formed of the softest sand, which sloped by degrees into a greater and greater depth. We did not fail to avail ourselves of the opportunity of enjoying so agreeable and salutary a recreation, whenever we could do so with impunity; that is, when we had a moment of respite from the aggressions of the musquetoes, which almost incessantly tormented us. The same attractions of the season that invited us to bathe, animated those insects to follow us wherever we went, and gave vigour to their persecution. We were not, however, wholly destitute of all resources of comfort. In a country where we had little beyond the mere necessaries of life, we considered every fountain that we discovered, and every plant of angelica we met with, as a source of luxury.

CHAPTER IX.

Some refreshing Springs of Water—Farther Account of the River Alten—Cataracts—Rapidity of the River in some Places, and quick Progress of the Boats—Plenty of Fish in the River Alten—The Church of Masi—Musquetoes—A small River called Keinosjoki—A Chain of Mountains to be crossed—Dull and melancholy Appearance of the Country—Snow on the Mountains in the Midst of Summer—Arrive at a solitary Cabin in a Wood—War with the Musquetoes—Change of Scenery in descending from the Mountains—Regain the River Alten, and meet with a Salmon Fisher—Pass another River, and pursue our Journey—Lose our Way, and at last reach Alten Gaard.

DURING the whole of this journey, although we were for the most part on water, we felt a constant thirst: this was but ill quenched by brandy, and it was augmented by our mode of living on dried meat and biscuit. The water of the lakes, greatly warmed by the continual rays of the sun, was far from being agreeable; but that of the springs, which we now and then found in the little narrow vallies, shaded by trees from the excessive heat, was so fresh and pleasant, that we could scarcely refrain from taking large draughts of it at the moment we found it. Some of those

springs were at four or five degrees of Celsius, which was a great difference in comparison of the lakes, which were at nineteen, and of the atmosphere, which was at twenty-five. It was a more delicious refreshment to us, than all the iced creams in the great cities of the south of Europe to the most confirmed epicure.

The river of Alten, after spreading into several lakes, and again contracting itself within its banks, which are here and there fringed with trees, and consist sometimes of rocks and sometimes of bare sand, precipitates itself all of a sudden from between two rocks about forty feet in perpendicular height. There it forms a magnificent cataract; and the agitated water sends up a cloud of vapour to the skies, through which is seen a beautiful and majestic rainbow. This cataract, of course, interrupted our navigation, and our boats were drawn over the land for nearly the space of an English mile, to a place where the river again became passable. On the borders of this cascade, the Laplanders, who accompanied us from Kautokeino, had a magazine of fish drying in the air. After exploring the beauties of the waterfall, we lighted up a fire in this place, and had some of those fishes dressed; a part boiled, and some broiled. The Lapland fashion of broiling, is by fixing a fish on a stick, and then holding it to the fire.

After our repast we pursued our voyage; and as we proceeded, had a fine view, and took a drawing of a very beautiful cataract made by the falls of a tributary stream belonging to the Alten, which descends on the right bank of that river over a number of shelving rocks, disposed like steps of stairs, as if they were the

work

work of art. It was covered with a canopy of trees, which intercepted the rays of the sun. We continued to descend by a branch of the river Alten, which flowed with such rapidity, that if credit may be given to our Lapland boatmen, we performed almost a Norwegian mile (or eight English) in little more than a quarter of an hour. When the current began to be very strong, our boatmen desired us to look at our watches, that we might be able to ascertain how much time we should take in getting on a mile. We did so; and when we reached the end of what they computed to be a Norwegian mile, we found that the time taken up was twenty minutes. Our boatmen now wanted some repose, and we set up our tent near the small church of Masi, on the right bank of the Alten. We lighted several fires, and one as usual in the midst of our tent, to defend us from the musquitos, our eternal tormentors. Our Laplanders, before laying themselves down to take their rest, asked permission to go and let down the nets in the river, and draw them only once. They obtained our leave to do so, and our interpreter thought it an amusement to go along with them. They returned in a quarter of an hour with more than two hundred fishes of different sorts and sizes, some more than a foot in length. Part of them was dressed for our supper: the rest the Laplanders gutted, and hung up on trees to dry, which they intended to take home with them on their return.

Next morning, before we resumed our voyage, we paid a visit to the small church of Masi, which is embosomed in the midst of

trees and brushwood, about three hundred paces from the banks of the river. If in the whole of our travcls in those northern regions we had not so much as seen one Laplander, or had landed near this church from a balloon, we could not possibly have formed any other opinion than that we had come to a land of pigmics. I was greatly struck with the architecture and the dimensions of this building: the whole was on so dwarfish a scale, so little, so low, and so narrow, that at first sight I should have been tempted to take it not for a real church, but for the model of one. To have an adequate idea of its diminutive size, imagine a door of little more than three feet high, a roof no more than six, and the whole edifice, comprising a vestibule, the body of the church, and a sacristy, or vestry, not exceeding eight yards in length, by four in breadth. It seemed as if I, who was thought in these parts,

“ In bigness to surpass earth’s giant sons,”

might, when placed in a corner of the church, the farthest from the pulpit, have almost touched the minister’s nose with the point of my boot, by stretching out my leg without even rising from my seat. The native of Italy could not restrain a smile at this specimen of Lapland architecture.

When we had passed about two Norwegian miles and a half farther down the river, we met with two Laplanders of Kautokeino, who had travelled thus far for the purpose of fishing. We had now arrived at the place where it became necessary for us to quit our boats, and to pursue our journey on foot over that great

chain of mountains into which the river Alten insinuates itself, and flowing, by many windings, through its whole extent, breaks out and rushes down in many places, and forms a number of cataracts. As our baggage appeared too heavy to our wary Laplanders of Kautokeino, they engaged the two fishers also to accompany us, which lightened the burthen of each, by the division of five parts into seven. They drew the boats on land, and made them fast to some trees. We then began to ascend the mountain on the left bank of the Alten, very near to a brook, or rather small river, called Kionos-joki, which descends from the mountain Kullitunduri. This brook forms at one place a very singular cascade, by opening a passage for itself under the surface of the rocks, and passing, where it begins to fall, under a natural bridge.

We continued to ascend, for the space of four English miles, through a thicket of dwarf birch (*betula nana*) and birch-trees, and over ground uniformly covered with thick moss, which rendered our journey extremely fatiguing: The day was overcast with clouds, but still there was a suffocating heat, which occasioned a great depression and heaviness of spirits. This was the most favourable opportunity that could possibly be imagined for the musquetoes. The quantity of those terrible insects lodged amongst the bushes and moss was so great, that at every step we raised such a cloud of them, as covered us all over from head to foot. Imagine a number of putrid bacon hams exposed to the rays of a summer's sun, and all covered with flies: such was our condition, and the disgusting appearance of our persons. After we had

had ascended four miles, the mountain began to assume a flatish and naked aspect, without a single tree. It was wholly covered with the common moss of the rein-deer, save where this extensive carpet was broken, and chequered with morasses, basins of water, and lakes, altogether forming a landscape the most dreary and melancholy conceivable. There was nothing to engage our attention, to amuse our fancy, or to console and cheer our spirits. A vast expanse lay before us, which we were to measure with our feet, through morasses in which we were not without danger of being swallowed up. On the summit of this chain of mountains we traversed a space of not less than fifteen English miles, sometimes wrapped in a cloud, and sometimes marching over the snow, though in the midst of summer. The temperature of the air, in this elevation, had undergone a considerable change. Our thermometer indicated a remarkable difference of degrees from that of the surface of the river of Alten. This climate was not very inviting to the musquitoes. If we had not been obliged to pursue our way through a number of low shrubs, we should have been but little troubled by them: but the swarms that we raised from the bushes when we began to climb, accompanied us faithfully during the whole of our progress through the mountains. Even when our route lay through heights covered with snow, our eternal foes pursued us still. Unfortunately it was a perfect calm: not a breath of wind to drive away those pestiferous companions.

In the course of our journey through those lofty and dreary regions,

gions, we started a white hare, and some birds of different sorts : but it was not without difficulty and trouble that we could fire a shot, on account of the insects. The pleasure of shooting any thing was dearly purchased by the pain to be endured in performing that operation. In order to charge, level our pieces, and take aim, it was necessary to pull off our gloves, and put aside the veils that covered our faces : but when all this was done, or while doing, our enemies, ever watchful for a favourable moment of attack, allured by the scent of their prey, fell on the parts exposed without mercy by millions.

We began to be exceedingly fatigued ; but as there was no fuel at hand for making fires to drive away the musquectoes, which did not permit us either to take refreshment or repose, we pushed on in quest of some trees, and made, by a roundabout way, towards a cabin, which we were told by one of the oldest of our guides, had been erected in a plantation not far off by some travelling merchants, for the purpose of resting and warming themselves in the winter season, while the Laplanders baited their rein-deer. This cabin is a square room about eight or ten feet in diameter, constructed of wood, with a hole in the top for letting out the smoke of the fire in the centre. We did not all go into the cabin at once ; but after the Laplanders had collected abundance of the withered branches of trees, one of them entered alone and lighted the fire, having first used the precaution of stopping up the hole in the roof in order to keep in the smoke. When the chamber was so completely filled with smoke as almost to pre-

vent respiration, the rest of the company were permitted to go into it. The insects, with which we were covered from head to foot, were obliged to quit their prey and remain at the door, enraged that they durst not advance to attack us in our retreat. This little hole in which we were all huddled one among another, quite full of smoke, and with no other carpet or floor than the bare earth, was more agreeable to us than any of the inns I had ever visited in France or England. In the middle of the room there was a good fire, and our tent placed on leaves of the birch-tree served us for a bed. We now set about dressing the game we had killed, being ourselves the cooks. We had a comfortable supper; and while the thick and pungent smoke made the tears trickle down our cheeks in large drops, we merrily drank, in a bumper of brandy, to the destruction of our enemies, who kept us in a state of blockade, still hovering at the gate of our citadel, and furious with resentment at the trick we had played them. The hole for letting out the smoke being opened for a short time, some of the insects had the courage to come in, but soon paid the forfeit of their temerity: but in return, if any of our garrison made a sally to fetch wood or water, or any other necessary, the whole flying army took ample vengeance by attacking and almost devouring him alive. Having finished our cookery and our supper, we laid ourselves down quite close to one another, the Laplanders literally upon each other, like entwined serpents in winter; the whole company lying around our great preserver and protector, the central fire.

A change having taken place in the atmosphere, there suddenly arose such a storm of wind and rain, as threatened almost to throw down our cabin. The small degree of comfort our shelter afforded was enhanced by the howling of the tempest, and by the consideration that it would involve the destruction of our enemies. At every whistling blast of the wind, "Behold now," we said to one another, "the total discomfiture of our besiegers! They are "put to rout, dispersed, and driven before the wind to a hundred "miles distance!" This consolatory reflection contributed to lull us to a sound sleep, which the succeeding calm did not for some time disturb. In the morning I went boldly out of my hole, without hat, gloves, or veil, to breathe a little fresh air, and, being now freed from the incessant attacks of the musquitos, to view in tranquillity the face of the country. I took a walk round the cabin, in order to make myself sure that we were now at last in a state of peace and safety: when lo! an ambuscade rushed forth against me. I was all of a sudden covered over with the whole army of insects. I fought, wrapped myself close up as well as I could, and fled to the cabin, which, for want of due fumigation, did not afford me relief so soon and so easily as I expected. During the storm the insects had the sagacity to get behind the side of the cabin that was sheltered from the violence of the wind, and waited till it should be over, and till an opportunity offered of making a fresh attack. Their plan and tactics were attended with complete success. When we resumed our journey, we were still

attended by an host of assailants almost as numerous as that by which we had been pursued to the cabin.

We had yet forty miles to travel before we should arrive at Alten, though we had already advanced twenty miles from the place where we left the river. The storm that had prevailed in the night had not brought fine weather by a dissipation of the clouds. The space over which we were to go this day presented a prospect almost as dreary as the day before. It seemed to us that we were sometimes going higher up in the mountains than we had hitherto done: we still found snow as we proceeded. Our servant was particularly charmed with the idea of our being so near the clouds: he seemed to imagine that he was already divested of a part of his mortality; and the better to enjoy the illusion, he would sometimes go out of his way and take a circuit, in order to get higher up in the atmosphere. At one time he was wholly out of our sight: we began to call him, but he did not hear us; we waited for him, but he did not come; we fired our guns that he might know whereabouts we were: still he did not make his appearance. If he had been a handsomer youth, we might have been induced to suspect that Jupiter had sent his eagle to fetch him, as he did in former times for Ganymede; but his figure prevented any such apprehension. He returned to us at last; and on our interrogating him why he left his company, he said, that seeing a beautiful cloud very near him, he had run after it for the purpose of knowing better than he did what kind of thing it was;

but

but that he found himself by degrees so involved in it, as to lose his way, and to be ignorant of the direction we had taken.

When we had any eminence to ascend, we looked at our thermometer at the bottom, and found that it was colder by two degrees at the summit of some of them. The weather all the while was very unfavourable and incommodious for travelling: it was excessively moist, and the clouds with which we were constantly surrounded, communicated such a degree of humidity to our tent, baggage and clothes, that we could nowhere enjoy any comfortable repose. We thought it better, without halting, to push forward as well as we could. At length, by dint of perseverance in our fatiguing progress, we began to descend the mountains. After passing by a cataract, dashing perpendicularly from the summit of some rocks, which was fed by the melting masses of snow and the moisture of the clouds that crept along the brows of the mountains, we were presented with the most charming landscapes. We were ready to fancy ourselves transported as by a magic rod into another atmosphere, another country, another climate. On the opposite side of those mountains, which are the Alps of Lapland, all is on a gigantic scale, all is rich and beautiful. Vegetation of every kind is both abundant and luxuriant, the herbage thick, and the trees large. Here they start up to view all at once in such frequent and extensive groupes, as are not to be seen any where in any of the declivities of the southern chain of mountains. We plunged into the depths of a wood where the grass rose to the height of our knees: but I cannot express the pleasure I felt at

seeing

seeing again the river of Alten rolling its pellucid stream through rich meadows, and with a velocity which recalled to our minds our passage from Kautokeino to Koinosjoki. Betwixt Kautokeino to the charming district where we had now arrived, a space of one hundred and twenty English miles, we did not meet with a human creature, excepting the two Laplanders of Kautokcino, who left their nets and followed us, as before-mentioned.

At the place where we now were, we at length fell in with a salmon-fisher, who had come thither with his wife. It is so unusual and unheard-of a thing to meet with any human being in those sequestered regions, that when the woman heard the noise we made in the woods, she was affrighted, and wanted to persuade her husband to betake himself with her to flight, for fear of some wild beast, or unknown monster, coming to devour them. When we came up she had not recovered herself; however she had become more composed as she had a nearer view of us while we approached. She was young, and the changes of colour in her countenance occasioned by fear rendered her the more interesting. Perhaps it was the effect of our present solitude, and owing to the circumstance that we had not enjoyed the pleasure of seeing the fair sex for a long time, but I thought that this woman was not unworthy of a place in the number of beauties. She had black eyes, regular features, and chestnut hair. Whatever was the cause I know not, but I could not help fixing my eyes on her more than on any other of the surrounding objects. The fisher had a store of excellent salmon, and also a pot for boiling it. He cut two or

three of his fish into slices, and treated our whole caravan with a dish of his salmon, prepared in the manner of soup and bouillie, seasoned with some herbs and salt, and a handful of oatmeal, which he took out of a bag that seemed to form not the least important article of his wealth. Having neither plate, fork, nor spoon, we were obliged to supply the place of these with pieces of the bark of the birch-tree, and we made an excellent dinner.

This salmon-fisher's boat was of great use in transporting us over a river that obstructed our way to Alten, where we were desirous of arriving as quickly as possible; in order to put an end to a fatiguing journey of nearly forty miles through the mountains. We were landed from the boat in a wood, the paths or tracts of which gave us to understand that we had now come to a country inhabited by men. We enquired every instant of our guides who went before us, where was Alten-Gaard? how many miles we had travelled, and how many we had yet to go? Every moment we expected to be at our journey's end, and our knees began to tremble, unable any longer to support us, as we pursued our winding road through this forest; when, to our extreme mortification as well as surprise, we discovered that the labyrinthical tract we followed had misled us; and after an hour's walking we perceived that we were exactly at the same spot where we had landed from the fisherman's boat.* Amidst this desolation, we could not help

* Nel bosco Ferrau molto si avvolse
E ritrovossi alfin onde si tolse. ARIOSTO.

“ Long through the devious wilds the Spaniard past,
“ And to the river's banks returned at last:
“ The place again the wandering warrior view'd,
“ Where late he dropt his casque amid the flood.

laughing most heartily, and taking this miserable adventure easily. It was but a harsh kind of pleasantry ; but, as there was no remedy, we determined to set out afresh ; and, by way of greater precaution, we had recourse to our compasses, in order to apprise our guides when we thought they were proceeding in a wrong direction. This contrivance was not without its utility ; and we soon came in sight of the place whither we were bound. But before we could arrive at Alten-Gaard, we had yet a journey of eight miles to accomplish. As we were incapable of this without exhausting ourselves too much, we went in and slept some hours at the first house that we came to. Next day we reached the habitation of a Norwegian merchant, which alone composed the village, so much longed for, of Alten.

CHAPTER X.

*Situation of Alten-Gaard—Prospect to the Frozen or Icy Ocean—
Bath in this Sea—Inhabitants of Alten-Gaard; their Hospitality—
Plan for proceeding to the North Cape by Water—Departure from
Alten-Gaard—Pass near Mount Himmellar, or Heaven-man; Wa-
terfalls from this Mountain—Beautiful Scenery—Meet with the
Habitation of a Lapland Family, but find the House deserted—
Visit another Hut—Condition of the Laplanders on this Coast—
Their Mode of Life, and happy Simplicity—Affecting Family-scene
—Fall in with some wandering or mountain Laplanders—Their
Tents and Premises described—A Herd of Rein-deer—Miserable
Appearance of these Animals—Their great Sufferings from the Heat,
and the Flies, especially the *Œstrus Tarandi*, Linn.—Rein-deer
Milk—Pass the Whaal Sund, or Sound of Whales—Hævesund, a
single House, in a dismal Situation—Appearance of Nature as you
approach the North Cape—Magerön, or Bare Island—Arrive at
the NORTH CAPE—Description of this Promontory.*

IN walking to the merchant's house we observed in an adjoining pasture two or three horses. The appearance of this animal, which we had not seen in the course of five hundred miles, indicated that we had come to the residence of a person who was

a stranger here, and the native of a civilized country. The house was situated on an eminence, and commanded on one side a view of the opposite mountains, and the masses of snow with which they are constantly covered ; on the other side it afforded a prospect to the Frozen Ocean, which here penetrates into the land, and forms a considerable gulf, near which the house in question was built. We were delighted at finding ourselves at so short a distance from the object of our journey, which was to put an end to our toils and hardships. The beautiful colour of the sea, and the brilliant transparency of the waters, offered a most pleasing spectacle to our eyes ; but nothing, indeed, cheered our minds so much as the idea of having so far succeeded in our enterprize. The sight of mountains covered with snow, and the name of the Frozen Ocean, amidst a heat as great as that in Italy, heightened the contrast between those opposite circumstances, and represented this place to our imagination as something singular and extraordinary, which was not to be met with in any other part of the world. Even the very thought of having reached the Frozen Ocean had something sublime in it : to enjoy it still farther, and to make the most of it, we determined to throw ourselves into the waves of this sea, and to recruit our exhausted strength by a bath. The merchant gave us warning not to do this ; nobody, he said, risked bathing there, for fear of sharks : but we could not resist the strong inclination that impelled us, and we did venture to plunge into the water. This, however, was so insufferably cold, that it was not long before we came out of it, and we felt our

our legs so benumbed that they were scarcely able to support us on the beach.

After dressing ourselves and shaving our beards, which were of six days growth, we were called to dinner ; and not a little surprised to find six different dishes, with a bottle of wine set down for each person. This prospect comforted us still more than the view of the Frozen Ocean, and after dinner we found ourselves more refreshed by the wine than we had been by the sea water. We thought ourselves now in paradise, in elysium, in an enchanted palace. Every thing was good ; every thing was delicious ; and the keenness of our appetite doubled the convivial and social pleasure. The merchant was a married man, and his lady was an excellent practical cook, as well as a perfect housewife. They had a boy who waited at table ; and the society of the house was increased by the residence of the bailiff of that district of Lapland, who after the death of his wife had come to live with the merchant, for the sake of company. The bailiff was a very worthy and pleasant man, and much esteemed in this family, and in all the district. We found ourselves so comfortably situated here, that it was not without regret we began to talk of proceeding in our expedition to the North Cape ; this, however, was indispensable, for it was proper and necessary to avail ourselves of the favourable season. We inquired into the best manner of performing this route ; how many days it would require by land, and how many by sea ; if any one had made this journey before us ; and what was the distance between the North Cape and Al-

ten? We were informed that the North Cape was distant from Alten thirteen Norwegian miles; that is, above a hundred miles English; that it was impossible to get there by land, and that the only way was to go by sea. The whole of this peninsula they described as one continuation of mountains, intersected by lakes, rivers, and impenetrable morasses, which would intercept our progress at every step. They assured us, that admitting the possibility of overcoming those obstacles, we could not possibly reach the North Cape by that way in less time than a fortnight. A journey to the North Cape, they said, had never been undertaken by any one in summer, on account of its great length and the almost insuperable difficulty of accomplishing it: and as we were limited in respect of time, and had a great distance to go back to Tornæa, we might be too late in the season for doing so. If we were overtaken by the bad weather, we should not be able to return till winter had fairly set in, so that we might travel in sledges. After weighing all circumstances, we determined to proceed to the North Cape by water; and we proposed, when we should be about half way to make some excursions into the peninsula.

The third day of our stay at Alten, the merchant procured us four men, and an open boat with four oars. One of these men had doubled the Cape before, and consequently was acquainted with the course to be taken. The other three were very good seamen, and had been on those coasts on the business of fishing. One of them, who acted as pilot, spoke the Norse, or Norwegian language; the other three that of Finland and Lapland. It promised

mised on the whole to be a very pleasant and comfortable expedition. We were furnished with cushions and mattresses, bed clothes and coverings. By way of provisions, we had every thing that was good, such as white wine, claret, brandy, fresh salmon, roasted fowls, veal, hams, coffee, tea, with the necessary utensils; and, in a word, all that we could possibly have occasion for. It was, indeed, nothing but a party of pleasure on the icy ocean. The gulf that I have mentioned, indenting the mountains, offered every where the most magnificent and interesting prospect.

We set out from Alten, on Monday the 15th of July, at two o'clock in the afternoon; and we did not arrive at the Cape till the night between the Friday and Saturday following. Three miles from Alten we passed on our right a mountain, called in Norwegian *Himellar*, or Heaven-man, from which there fell into the sea five or six cascades, two or three hundred yards of perpendicular height. Farther onward was another grand cataract, where we quenched our thirst. We went up into the mountains to see the place where it had its source, and were surprised to find at their summit very beautiful natural meadows. Still farther off, we again saw a fine cascade rushing down from another mountain. All these waterfalls were supplied, no doubt, by the melting of the snow on the distant mountains, which formed as it were the back ground of the picture. The cascade last mentioned was precipitated from a hill, adorned on three sides with a wood of birch, spread in the manner of an amphitheatre, so that it appeared as if it had been planted by the hand of man. In the midst

of this pleasure-ground stood a wooden house, covered with turf, and inhabited by a family of fixed Laplanders. I wished to pay them a visit ; one of our guides, however, besought me not to go there immediately by myself, but to send him on before me ; because, said he, the family will perhaps be frightened at the sight of a stranger of so different an appearance from their own. He went into the house, but found nobody there : it was completely deserted : the family had either gone on a fishing excursion, or were in the mountains tending their reindeer. The architects of the houses on those coasts appear to have been of the same school with him who built the church of Masi ; though it might not bear quite the same proportion to that church, which our houses do to cathedrals. I cannot say that we were very discreet in our visit : we looked at, and searched out every thing, even their pockets : all was open and exposed ; for there are no locks in Lapland. We found not any article of curiosity, besides a box of rosin. This juice issues from the fir-tree, of which the Laplanders make an ointment for dressing their wounds. We returned with regret to our boats, and it was not without pain that we bade adieu to so charming a prospect, which bore a striking resemblance to all that is most romantic and delightful in the natural scenery of Switzerland.

There was not a breath of wind, and our boatmen were much fatigued with rowing in so great a heat. In order to give them some respite, and to gratify our own curiosity, we visited all the Laplanders settled on this coast, who generally lived at the distance

tance of a Norwegian mile, or mile and a-half from one another. Abundance and contentment reign in all their dwellings. Each Laplander is the proprietor of the territory around his little mansion, to the extent of a Norwegian mile, or eight ~~eight~~ English, in every direction. They have some cows which furnish them with excellent milk, and meadow land which yields hay for their fodder in winter. They have every one a store of fish dried in the sun, not only for their own use, but wherewithal to purchase luxuries ; that is, salt, oatmeal, and some woollen clothes. Their houses are constructed in the form of tents : a hole in the middle, which gives them light, serves also as an aperture for letting out the smoke of the fire, which is always placed in the centre of the cabin ; and around which they sleep quite close to one another. In winter, besides the heat of the fire, they have the benefit of the animal warmth of the cows, with whom they share the shelter of their roof, as the inhabitants of Scotland do in the highlands and the northern isles. The doors of their houses in summer are always open ; and although in that season there is no night, they are accustomed to sleep at the same time as other Europeans ; with the exception of those who are in such incessant pursuit of pleasure, as to fly from one object to another, and push the hours gradually on, till they convert night into day. We have gone into their cabins at one and two o'clock, after the hour that we call midnight, when we always found the whole family lain down and asleep. We have sometimes remained a quarter of an hour near them before they were awakened by our presence from

their profound slumber. They not only sleep with their doors wide open, but so soundly, that it is not easy to rouse them. The fact is, that they are not exposed to any kind of danger or disturbance—they are far removed from the anxieties and fears that attend envied possessions ; and the only wild beasts that could possibly give them any alarm or uneasiness are, the wolves and bears. But these animals never attack houses, as they procure sufficient nourishment by following the wandering Laplanders with their rein-deer. There are no venomous animals in those rude countries ; and as to men, they all live in the most perfect innocence.

Here the necessity of government, for the distribution of justice, and the equal protection of the people, exists not. A small number of inhabitants, dispersed over immense tracts of lands, have little inducement to make aggressions on each other ; and the general equality of condition that prevails, and above all, the constitutional feebleness of passion, and equanimity of temper, prevent not only infliction of injuries, but resentment. Though the Laplanders are defenceless, yet the rigours of their climate, and their poverty, secure them from invasion ; and thus they exist without combination or protection, and without bending with submission to superiors. Here the melancholy examples, which exist in all histories, of the great tyrannizing over the meeker sort, are not to be found, nor the falsehood and perjury which generally prevail among rude and barbarous nations.

In one of the families we visited, we witnessed a very tender and affecting scene, which convinced us that sensibility is not banished

from

from those northern latitudes. At three o'clock after midnight we entered a cabin, in which there were, besides the master of the house, his mother, his young wife, and two infant children. They were fast asleep, and we waited for some time, that we might awaken them gently : they all of them lay on the ground, which they had covered with the branches and leaves of the fragrant and aromatic birch ; over these were spread some reindeer skins. They slept as the maritime Laplanders do in general, with their clothes on ; but these being very large and loose, occasion no inconvenience by impeding in any degree the circulation of the blood. The wife awoke first, and casting her eyes on one of our boatmen, whom she knew, she was glad to see him, and entered into conversation with him in Lapponec. The husband and his aged mother also awoke soon after, but the children continued in their sound sleep. The old woman perceiving our Laplander, burst into a flood of tears ; the young woman likewise wept ; so did the boatman ; and so by instinctive sympathy did we all, without knowing why. For a moment we preserved a dead silence ; when our interpreter having entered the cabin, and found us in tears, asked in Finnish the reason of all this sorrow ? The occasion was this—the old woman had seen the boatman about a year before, when she was in perfect health ; but since that time she had been seized with a stroke of apoplexy, which had totally deprived her of the use of speech. After this general emotion had subsided, we asked for some reindeer milk and cheese. Our landlady immediately went out of the cabin and

conducted us to the store, which was a little wooden box, or shed, raised upon beams to a certain height from the ground, that the provisions it contained might not be damaged by the humidity of the snow in winter. We were astonished at the quantity of things this good and provident woman had in her magazine. There was great plenty of dried fish, and dried reindeer flesh, cheese, and tongues of the reindeer, oatmeal, reindeer skins, fur and woollen cloths, and other articles. Every thing bespoke riches and comfort; and, what was most remarkable, our kind hostess gave us whatever we wanted in the most liberal manner, and without the least idea of receiving aught in return; on the contrary, she persisted in refusing to accept any money when we offered it. I have seen very few places where the people live in so easy and happy a simplicity as in the maritime districts of Lapland. Their huts are dark and narrow, and they have neither bedsteads, chairs, nor tables; for they sleep and sit more comfortably on the ground, and their houses are as convenient as they need be for their occupations and different pursuits. Their local situation has, at least in summer, a cheerful and smiling aspect, being placed near the sea, and at the foot or on the sides of mountains, where the bountiful hand of nature has given them rich pastures that want no cultivation; and what is most valuable, the ground on which they tread, and the soil which yields them sustenance, they call their own, and acknowledge no landlord over it. There is no master to trouble them, or to inspire them with any fear or apprehension: the only severe influence they have to dread, arises now and then from the rapacity of merchants.



We left this cabin to pursue our voyage ; but after proceeding five or six English miles, we were obliged by the wind again to land, when we determined to take advantage of this interval to make an excursion into the interior of the country, in order to try if we could meet with any thing remarkable, and particularly, whether we could not get a sight of some wandering Laplanders with their rein-deer and their tents. We travelled seven or eight English miles on foot, and found here, and there, amidst those mountains, delicious spots and vallies, enclosed by hills that were covered with birch and some other trees. We enjoyed the shade, and the freshness of the brooks or rivulets that watered the vallies. We at last came to a mountain Laplander's tent, and our curiosity was satisfied : this tent was of a conical form, and not shaped as tents are in general. They put together several posts or beams of wood, fresh cut down, sticking them with one end in the ground, and making them meet at the top. These beams they covered all round with pieces of woollen cloth, which they fastened to one another. The diameter of the tent we saw at the base was eight English feet. In the middle was the fire, and around the fire sat the Laplander's wife, a boy, who was his son, and some inhospitable and surly dogs, which never ceased barking at us all the time we remained near them. Fast by the tent was erected a shed, consisting of five or six sticks or posts, that were fastened to one another near the top, in the same manner as the tent, and covered with skins and pieces of cloth. Under this canopy the Laplanders kept their provisions, which were cheese

of the rein-deer, a small quantity of milk of the same, and dried fish. A little further was a rude inclosure, or paling, made in haste, which served as a fold or yard for the rein-deer when they were brought together to be milked—those animals were not near the tents at the time we made our visit: they were in the mountains, from whence they would not descend till towards night. As we did not feel ourselves disposed to ramble about in quest of them, at the hazard of losing ourselves among a series of mountains, exhibiting throughout an uniform appearance, we judged it more advisable to offer some brandy to the Laplanders, on condition that they would go with their dogs and bring the rein-deer home, or as near as they could to the tent. Scarcely had they swallowed the brandy, which we had given them as an earnest of more, when we heard the shrill barking of the dogs resounding through the mountains. The Laplanders then told us that the rein-deer were coming; and very shortly after we beheld a troop of not less than three hundred deer descending from the mountains in a direction towards the tent. We then insisted that they should drive the rein-deer within the inclosure near the tent, that we might have an opportunity of seeing and examining them the better, and tasting the milk fresh from the does. They did as we desired; but not without very great difficulty, because the animals, not being accustomed to be shut up in the fold at that hour of the day, were unwilling to be confined, and it was not till after repeated efforts that the Laplanders were able at last, with the assistance of the dogs, to compel

compel them to enter. We had then time to view them at our leisure. Those poor animals were lean, and of a sad and melancholy appearance: their hair hung down, and their excessive panting indicated how much they suffered at this season of heat and affliction: their skins were pierced here and there, and ulcerated by the musquatoes, and the eggs of the fly called, in Lapponese, *kerma*, (*Asthrus tarandi*, Linn.) which tormented them in the most cruel manner. I made a collection of those insects and their eggs, intending them as presents for my entomological friends. As to the milk which we tasted, it is not so good at this time as in winter. In summer it has always a kind of strong or wild taste, and too much of what the French call an *haut gout*.

Our guides advised us to return to the boats, and avail ourselves of the favourable breeze that had sprung up for pursuing our voyage; and we took leave of our Laplanders, whose only regret at our departure seemed to be a mortification at the removal of the brandy. We passed in our boat the Whaal-Sund, or Sound of Whales, which was agitated at the same time by the current that sets in here very strong, and by the wind, which blew contrary to the current. Whales resort to this strait in great numbers, and are, as we were told, very common in all these seas. Although we were assured by our mariners, that they had never passed this strait without seeing eight or ten whales, we were so unfortunate as not to get a sight of one. We went on shore to the house of a merchant, situated on an island near Havesund: this was perhaps the most dismal habitation on the face of the earth.

earth. The whole land around it did not produce one tree or shrub; no, nor so much as a blade of grass: there was nothing to be seen but naked rocks. The inhabitant of that house had not any thing but what he brought from a distance, not even fuel. The sun for three months of the year is not visible; and if, during that space of time, the atmosphere were not illuminated by the *aurora borealis*, he would be buried in profound darkness—Dreadful place to live at! The only attraction in these abodes is fishing, and the love of gain. The nearer one approaches the North Cape, the more nature seems to frown: vegetation dies, and leaves behind it nothing but naked rocks.

Proceeding on our voyage, we left on our right the strait formed by Magerön, or Bare Island, and the continent. The vast expanse of the Frozen Ocean opened to our left, and we arrived at last at the extremest point of Europe, known by the name of the NORTH CAPE, exactly at midnight.

Sistimus hic tandem, nobis ubi defuit orbis.*

The North Cape is an enormous rock, which projecting far into the ocean, and being exposed to all the fury of the waves and the outrage of tempests, crumbles every year more and more into ruins. Here every thing is solitary, every thing is sterl, every thing sad and despondent. The shadowy forest no longer adorns the brow of the mountain; the singing of the birds, which enlivened even the woods of Lapland, is no longer heard in this

* Here then we stood, and touch'd the earth's last point.

scene of desolation ; the ruggedness of the dark gray rock is not covered by a single shrub ; the only music is the hoarse murmuring of the waves, ever and anon renewing their assaults on the huge masses that oppose them. The northern sun, creeping at midnight at the distance of five diameters along the horizon, and the immeasurable ocean in apparent contact with the skies, form the grand outlines in the sublime picture presented to the astonished spectator. The incessant cares and pursuits of anxious mortals are recollected as a dream ; the various forms and energies of animated nature are forgotten ; the earth is contemplated only in its elements, and as constituting a part of the solar system.

CHAPTER XI.

A Grotto among the Rocks of the Cape—Rocks, of which the North Cape is composed, chiefly Granite—Birds seen near that Cape—Return from the North Cape—A different Route to Alten from the one taken before—Island of Maaso, and its Inhabitants—Great Hospitality and Attention—Advantage of being mistaken for a Prince in travelling—A Place called Hammerfest—Hwalmysling, a Peninsula—Account of an English Frigate coming as far as Hammerfest some Years ago—Arrive again at Alten—Excursion to Telwig, a great Fishmarket—Embark on the River Alten—singular Combination of three Cataracts—Attempt to ascend in the Boats one of these Waterfalls—Reasons for this Adventure—It fails, and the Travellers are obliged to proceed on Foot over the Mountains—Difference of Temperature in the Air—Regain the River, and meet the Laplanders of Kautokeino—Reach Kautokeino; thence to Enontekis—Difficulty of the Journey to the latter Place—Two English Travellers at Enontekis: their Memorandums—The Clergyman of Enontekis—Extracts from a manuscript Account, written by that Clergyman, respecting the Parish of Enontekis: its Population, Church, Inhabitants, Colonies, Manners, and natural Productions; among the Latter some Plants and Birds, and Re-

marks

marks on the Diseases of the Rein-deer—Journey from Enontekis to Tornedå and Uleåborg—Conclusion.

HAVING made drawings of those rocks under various aspects, we landed from our boat, and scrambled upon the top of them. We there found some pieces of wood thrown out by the sea, with which we kindled a fire in the face of the Frozen Ocean, and began to prepare a repast. In looking about for a place to which we might retire with some comfort, we discovered a grotto formed by three rocks, whose smooth and polished sides indicated that they had heretofore been washed, for many ages, by the waves of the sea. In the midst of these rocks was a large roundish stone, under which there ran a small stream of water. As we were tracing the course of this stream, which had its source in a neighbouring mountain, we found on its margin some plants of angelica. This we regarded as a great acquisition to our table, because we had found it to be a very refreshing and salubrious vegetable. The grotto was so convenient, that it had the appearance of being the work of art. The stone in the centre served for a table, around which we could place ourselves; and we had only to stoop down to replenish our bowl with water, perfectly fresh and sweet, though we were within a few paces of the salt sea. We regretted much that we had no iron implement wherewith to engrave some motto, or at least our names on those rocks. After we had finished our repast, we amused ourselves with going up to the highest parts of the rocky eminence, which were very rugged,

and thence precipitating down large masses of stone. These in their fall made a terrible crash, as they struck against every thing that opposed their way to the ocean. The rocks on those coasts are for the most part composed of granite. The North Cape itself is a mass of granite, interspersed with some veins of quartz, lying in the direction of south and north. In the semicircle of rocks which form the Cape, is a point or prominence towards the west, where we found snow on a spot not more than two fathoms above the level of the sea; a circumstance which appears, in some measure, to confound the French theory respecting snow at a certain height in the atmosphere, and indeed the whole system of Mairan, Buffon, and Baillie, respecting central heat.

The only species of birds that we could discover on those rocks was one of the genus *motacilla*. But at a small distance from the Cape, out at sea, the *uria grille*, some species of *larus*, and the *alca arctica* were very common; and I succeeded in bringing down several of those birds.

A gentle breeze setting in from towards the north invited us to leave the Cape, and enabled us to make use of our sail: but we had scarcely proceeded five or six English miles, when we were overtaken by a calm, which obliged our people to have recourse to their oars. We did not return to Alten by the same course, but visited whatever we understood to be in any way worthy of our notice on the islands that fringe the coast. We came first to the isle of Maaso, which is inhabited by a clergyman, a merchant, and thirty families besides. The merchant received us with the

highest

highest marks of distinction : he offered us different kinds of liquor; he made us a present of some sponges, which are found in those parts, together with some sea-shells ; among the latter was a *cancer Bernhardus eremita*, in a *buccinum glaciale* : he gave us also a specimen of an *alca alce*, which his son had stuffed ; he shewed us the environs of his habitation ; these consisted simply of rocks and some caverns, where they hunted the otter : and at our departure, he hoisted the Danish flag, and saluted us with three discharges of his cannon. All these excessive marks of respect and veneration were not, perhaps, the effect of mere hospitality, but more probably of the delusive fancy that we were two princes travelling in disguise. This delusion was founded in a circumstance that had previously happened. A son of the late duke of Orleans, after travelling through Norway, came from thence to this coast in a ship. From the isle he proceeded to Alten, from Alten he traversed on horseback nearly the same ground that we had done, in company with a young man of the name of Montjoye : Both travelled under borrowed names : the first under that of Müller, the second under that of Froberg, which is of the same import in the German as his own name in French. The year after these gentlemen had been here, the merchants on the coast were informed by their correspondents that one of them was the Prince of Orleans : and from that time they believed in Norway, as well as on the coast of Lapland, that every stranger, accompanied by another, and one or two servants, was some prince on his travels, either for instruction or amusement. In order to form a just estimate of

the hospitable treatment we received at Maaso, it would be necessary to know whether the two persons just mentioned obtained the same marks of respect that we did. I travelled afterwards with my countryman Mr. Bellotti, through Norway, where we were treated, in like manner, with the most distinguished marks of honour. I certainly acknowledge with gratitude the hospitality shewn us in that country; but I cannot, without due regard for truth, omit to notice, that it was every where believed that we were Italian princes, who had come to pass some time in the North, during the troubles of Italy; and all the almanacks were most carefully perused in order to find out what princes we might be. My friend being of a more delicate frame and complexion than I, passed for the unknown prince; and myself, who was of a more robust constitution and appearance, was taken for his secretary or travelling tutor. Some took him for a son of the duke of Parma, others for a son of the duke of Modena; and several who were more scrupulous in their investigation than the rest, referred to genealogical accounts, that by comparing his age with that of other young princes whom they found mentioned, they might be enabled to trace and ascertain his true rank and descent. I have no doubt but we should have met with the same polite hospitality, independently of all deception: but I cannot forbear thinking that this notion was not without its influence among certain classes of people in the principal towns of Norway, where we remained some days.

From Maaso we proceeded to Hammerfest, a place where there
are

are two or three merchants and a clergyman, with a few other families. All those little settlements on this coast bear a very near resemblance to each other: around them is the same sterility, the same nakedness, the same rocks.

Near Hammerfest flows a small river which passes through a pleasing glen, shaded by some birch-trees: in this river there are some excellent salmon caught. Directly opposite to Hammerfest is a peninsula called Hwalmysling, abounding very much with hares, for the skins of which the proprietor draws from two to three hundred rix dollars a year. One of the merchants at Hammerfest gave us a confused account of an English frigate, about seven or eight years before, having come to those coasts, in the time of his predecessors, with two astronomers, one of whom built an observatory for himself on a neighbouring mountain, and the other went to fix his residence for some time at the North Cape. He neither recollects the particular year, nor the names of the astronomers; but only that the appearance of the ship made such an impression on the people on those coasts, that they all came to see her, and went away with terrible apprehensions that she had come to carry war and destruction into their country. The clergyman of Hammerfest was so square and stout a man, and of so gigantic a stature, that if the extent of his understanding had borne any proportion to that of his corporal frame, he would have been the ablest divine of our age. He spoke both Latin and German, and was very inquisitive about news and politics. He was mightily rejoiced at seeing us, being convinced that we should be able to give him

him some news more recent than any that he had heard. One may form an idea of the little communication there is between those parts and the rest of Europe from the following circumstance: it was the 19th of July, 1799, and the minister of Hammerfest had received no intelligence concerning the great affairs of nations since the victory obtained by the English fleet at Aboukir, in August 1798.

We did not receive the same honours as at Maaso, because, perhaps, the merchants at Hammerfest had neither cannon nor ammunition. Such is the weakness and foolish vanity of human nature, that on our departure from this place, we were sensible of some disappointment in not hearing any report of cannon. We should not have been displeased if the same mark of respect, or rather folly, had been shewn us.

At Alten we found ready to meet us a man whom I had employed to collect plants and insects, and another who had come to entertain us with his fiddle, and to give us a specimen of the music of this part of Europe. *See Appendix.* At this village we remained several days for the purpose of making the necessary preparations for our return to the gulf of Bothnia. During this interval of repose, we made a short excursion to Telwig, in order to see the Laplanders who came thither from all quarters to sell their fish. It is a small port or creek of the sea, three miles from Alten, where there is a village inhabited by some merchants and a clergyman: it possesses a church.

I shall not fatigue my reader with a detail of all the minute cir-

cumstances of our return across the desert. I shall conduct him by rapid marches to Torneå, giving only the outline of our journey. In two boats we reascended the river Alten against all its cataracts, and by dint of perseverance, pushed farther up than any one had ever done before. The passage along this river is as picturesque as the imagination and heart of a painter can desire. Its banks are sometimes beautifully decked with birch ; at others they present a rugged and horrid aspect; perpendicular rocks, with here and there deep chasms and precipices, fearful and inaccessible. In our progress up the river, we met with a cascade, rushing perpendicularly from a rock, which had a striking resemblance to the ruins of the vaulted roof of a majestic cathedral : at the foot of these rocks is a small lake, and all around natural steps, as if cut in the stone, which gives to the whole the appearance of an ancient temple. Here we saw a bear who had come to the river near this place to slake his thirst, but who had no sooner spied us than he made off to the woods. A fox too came to drink at the same place, which was in front of our tent where we had passed the night.

Farther onward we were struck with two cascades opposite to each other, and both falling from the banks of the same river, Alten, which forms itself, at a small distance, an insurmountable cataract. The proximity of three such waterfalls is a circumstance perfectly singular in its kind ; at least I have never anywhere seen or heard of any thing similar ; and had I merely beheld it represented in a drawing, it would have appeared to me the work of fancy, and altogether incredible. Here we made an

effort

effort to mount up the cataract of the river, though it seemed to mock our design, and to be the *ne plus ultra* of our navigation. To facilitate our ascent, I placed the Laplanders in different situations with ropes in their hands, fastened to the boat, and one tied round my waist, in order to aid my escape in case the boat should founder or be overset. In fact, it was on the point of being sunk, and had not the Laplander who held the rope fastened to the poop drawn it back in good time, we must have gone to the bottom. The dangers and hazards incurred on these cataracts were not the effect either of a spirit of adventure or of necessity, but, paradoxical as it may seem, of laziness. We found ourselves seated tolerably at our ease in the boats; but if the farther navigation of the river should, after our utmost efforts, prove impracticable, then should we again be doomed to traverse a dreary chain of mountains, at the expence of an irksome and fatiguing journey on foot, and at the hazard of losing ourselves in the deserts. The farther we mounted up into the country by the river, the shorter would be our route by land. Should we be able to overcome this cataract, the river was likely to be smooth and even for a considerable course, when we might make use of our oars. These circumstances invited us to make the attempt: it was made, but proved fruitless.

We therefore took again to the mountains, making new traverses in order to avoid the lakes and rivers. It was not long before we found ourselves in another climate: the thermometer fell to four degrees of Celsius. Some clouds passing over our heads covered

covered us with snow or sleet. For twelve hours we travelled without intermission, except when we found it necessary to take some refreshment, before we regained the river Alten. The fear of a change of the weather, or of a storm, accelerated our march : nor did we indulge ourselves in either long or frequent pauses, during a journey that could not be less than fifty English miles. We arrived at last at the same place where we left the Laplanders of Kautokeino with their boats, and who waited in order to conduct us back to Kautokeino. We had sent a messenger to apprise them of our return, and to engage them to come there to meet us against that day. A northerly breeze saved our boatmen the trouble of rowing against the current. Some branches of the birch-tree, at that season in full leaf, set up in the poop, supplied the want of a sail.

Having arrived at Kautokeino, we were under the necessity of making another long journey on foot, as far as Enontekis, which place we wished to take into our route. The way was not then known to be practicable, never having been attempted before. The mountains which separate Enontekis from Kautokeino, are not half so high as those which divide Alten Gaard from Masi ; but we were destined to encounter as great difficulties here as on those of Norwegian Lapland. We had to ford rivers ; we were insulated by morasses ; we were bewildered in deserts. Our good Laplanders knew no more the place in which they were than we ourselves : their opinions on this point were divided ; and, but for the direction of our compass, we should have incurred the risk of

wandering till the approach of winter in those woods, or been under the necessity of returning to Kautokeino. At last we spied the steeple of the church of Enontekis, after travelling two days and a half, and a journey of near one hundred English miles. We arrived at Enontekis the day after the departure of two English travellers, who had undertaken the same journey as our's; but one of them being taken ill with a fever, they were obliged, after remaining for some time at this place, to return. This gentleman was a master of arts, and a fellow of Jesus college, Cambridge; a man of genius and lively parts, as well as learning: he had been in Italy, and understanding that an Italian was travelling to the northward, and would perhaps return that way, he wrote down in a kind of register, or book of record, kept by the worthy clergyman, four lines from Ariosto, which were admirably well adapted to my situation, and painted to the life the fatigues of my journey.

Sci giorni me n' andai mattina e sera,
 Per balze e per pendui orridi e strani,
 Dove non via, dove camin non era,
 Dove nè segno, nè vestigia umana.*

These two English gentlemen had staid with the clergyman for a week, and had been treated by the whole family with the

* Six tedious days, from morn to eve, I pass'd
 O'er many a pendent cliff and horrid waste;
 At length a wild and lonely vale I found,
 With hills and dreadful caves encompass'd round.

HOOLE'S *Transl. of Ariosto.*

utmost kindness during the illness that detained them. They determined to exhibit a show, which they conceived would draw the Laplanders from all quarters to this place, and which seemed calculated to make on the minds of this simple people a great impression. This was, to mount an air balloon. I know not what effect this object might produce on the natives, but I have reason to suppose that the concourse was not great. At their departure they wrote down in the register their names, with the following apostrophe:—“Stranger, whoever thou art, that visitest these remote regions of the North, return to thy native country, and acknowledge that philanthropy is taught amidst civilized nations, but practised where theories of science never come.”

On the opposite page of the book I again found the name of Mr. Vesvrotti, who had come here to let the Laplanders know, as he had before informed the Finlanders, in a kind of Franco-Latin, that he had heretofore been president of the parliament of Dijon.

“Libertatem quærens seditionisque theatrum fugiens, hic fuit,
“die 15^o Martii, anno 1792.”

“Carolus Richard de Vesvrotti, Dijionensis (of Dijon) præses
“in supremâ rationum curiâ Burgundiæ.”

The minister of Enontekis was a man of learning, and employed what leisure he has from his pastoral duties, in statistical and physiological investigations. He has made large collections in natural history of all kinds: he has also written a little book, containing answers to a number of queries, made by a Swedish

gentleman travelling in those parts, for the improvement of natural history. This respectable clergyman had gone out of the house a few minutes before our arrival. Finding his wife to be a very intelligent, as well as a civilized and well-bred woman, we put several questions to her respecting the population and natural productions of that part of the country, on which she produced her husband's manuscript, elucidating the very subjects concerning which we desired to obtain some information. This manuscript was divided into five chapters; the 1st. on the population of the parish of Enontekis; 2d. on ecclesiastical affairs; 3d. on the colonies established there; 4th. on the nomadical or pastoral Laplanders; and the 5th. on natural productions. I made some extracts from the manuscript, which I shall communicate to the reader.

The population of the village of Enontekis, and of the whole parish, consists of nine hundred and thirty souls; of which two hundred and fifty-eight are colonists, or fixed Laplanders; and six hundred and seventy-two are nomades, or wandering families, who live in the mountains taking care of the reindeer.

Concerning the yearly income of his living, and the rents received from this parish, the minister is silent: but he speaks much of the far-spread renown of the church of Enontekis; extended even to the most remote regions of the North. The Norwegians, he says, when they are going to undertake any long and dangerous journey, are in the habit of sending to the church of Enontekis, a candle to be burned there, or some other small present, by way of

of vow. He informs us that the wandering Laplanders still preserve among them some remains of paganism. It happens here and there in the deserts, that a stone is seen bearing some resemblance of the human form. The Laplanders, when they chance in the course of their movements from place to place with their herds, to pass by any of these stones, offer up sacrifices to the idol. There is always found near them a number of reindeer's horns. He mentions, that the Laplanders have amongst them a considerable quantity of money, which they are in the custom of burying in the earth; so that hundreds of rix dollars are frequently lost, as the proprietors are often overtaken by severe illness and death, before they have revealed to any one the place where their treasures are concealed.

Of the dress of the Laplanders, he observes, that there is scarcely any other difference between that of the mountaineers and that of those who have permanent habitations, except that these last are, in the summer season, in the habit of wearing woollen stuffs in place of the skins of reindeer; and that they have shirts, which the wandering Laplanders have not. The only book known among the Laplanders, according to this authority, is the prayer-book.

He speaks of a kind of glue made of the reindeer's horns, which, he says, is of a most excellent quality. He further states, that the most common disease among the reindeer, is that of the *milza*; for which there is no remedy, and of which the animal dies in the space of one year. He adds also, that diseases of the eyes, liver, heart, and feet, are very common to those creatures.

He mentions the enormous quantity of wolves, which in the course of the preceding year (1798) had committed extraordinary ravages among the rein-deer, and which he ascribes to the war in Finland.

On the subject of natural productions, he says, that potatoes thrive very well; but that other culinary roots and plants are not raised without much difficulty. Barley and oats are produced here. In the cultivation of the earth they make use of a plough of a construction peculiar to the country, but which is very well adapted to ploughing a soil where there is a great number of large stones to be avoided in that operation. The *rubus arcticus* does not thrive so well as the *rubus chamaemorus*.

The birds he notices are the following:—

<i>Strix Scandiaca</i>	<i>Tringa lobata</i>
<i>Strix Nyctea</i>	<i>Platalea Leucorodia</i>
<i>Turdus roseus</i>	<i>Anas nigra</i>
<i>Motacilla Succiaca</i>	<i>Anas Erythropus.</i>
<i>Tringa Lapponica</i>	

Of insects he neither gives any description or enumeration, nor any list of their names. He made a collection however of them, which he sent to his correspondents in Sweden, and to the academy of sciences, from which he has a pension of sixty rix dollars a year, to enable him to pursue his statistical researches, and to make observations, and attend to objects of natural history.

Our journey from Enontekis to Tornca lay always along the banks of rivers : we passed on to Muonionisca, where we saw our friend the priest, and our excellent pilot Simon. We visited our acquaintances at the different places we came to, for instance, at Kengis and Upper Tornca, where we paid our respects to the minister of the parish, and his amiable daughters. At Torneå we did not fail to wait on our friends, the rector and the merchants, who considered us prodigious travellers : and at last we made a triumphant entry into Uleåborg, where we displayed to our scrupulous friends, the shells, sponges, birds, and other natural curiosities we had collected, in proof of our having really been at the North Cape, the farthest extremity of Europe.

C O N C L U S I O N .

“ THUS ends a course,” says Reignard, in conclusion of his Journey to Lapland, “ which I would not but have made for all “ the gold in the world, and which I would not for all the gold in “ the world make over again.” The French traveller could not, in my mind, have drawn a juster picture of his character, and the spirit in which he undertook his distant travels, than is exhibited in this enigmatical mode of expression.

Curiosity is either the effect of self-interest, inspiring a desire of learning what may be useful ; or of “ pride, which makes us ambitious of knowing something unknown to others.” Does not the

the second part of this definition, by Rochefaucault, throw light upon, and remove as it were the veil from this sentence of Reignard, which is so much at hostility with itself? He would not, for all the gold in the world have forgone the vain satisfaction of having been the only Frenchman who had ever been in Lapland, but at the same time, by exaggerating the toils of his journey, he seems to be desirous of deterring every other person who might wish to perform it after him. The love of fame is justly denominated the last infirmity of noble minds; but when it degenerates into the frivolous vanity of discouraging others from an enterprise which we ourselves have accomplished, though conceived before to have been very difficult, it becomes very blameable. This failing is too common among men of every class, and particularly among men of letters. It is a sentiment wholly unworthy of a philosopher, and even degrading to his character. It implies a desire of retarding the progress of knowledge, under the ostentatious pretext of a zeal for diffusing it; and such discouragement is perhaps the most fatal, when it comes from a quarter respected and looked up to by the public.

Travels in Lapland, instead of leaving nothing in the mind of the traveller but an unproductive vanity, furnish every one who is desirous of extending the sphere of his knowledge, and who is captivated by the study of nature, with a thousand subjects worthy of his remark and investigation, and, probably, have even a tendency greatly to advance science, and to improve the happiness of human life. How vast a field is opened for research to the naturalist,

ralist, in those extensive and unexplored deserts ! The grand diversity and contrariety of climates ; the sudden transitions of the seasons ; those luminous meteors which, in winter, supply the place of the sun ; and that sun which, in summer, never quits the horizon—Are not these phenomena fitted to excite admiration ?

In those regions every thing wears an aspect of novelty. The rivers and lakes are stored with their particular kinds of fishes ; the mountains abound in mines of every species. The rein-deer, the glutton, and the lemming, are animals unknown in other parts of Europe. The ornithologist meets there with birds peculiar to those climates ; and the entomologist at every step finds, for the enrichment of his collection, rare and precious insects. Even the penetrating eye of Linnæus left something in this walk for future discovery. A number of insects, even of the order *lepidoptera* (butterflies), was afterwards discovered by Mr. Quenziel and others, and form very valuable articles in collections of this kind : and although the Pliny of Sweden has been minutely attentive to the objects of botany, and searched in the most distant corners for every indigenous plant which seemed

—Born to blush unseen,

And waste its sweetness in the desert air,

still his poverty find sufficient employment, in the class of cryptogamia, which when analysed by the chemists, may open new sources of industry in our manufactures and commerce.

If the traveller possess that enchanting art, by which, on his

return home, he may in his port-folio again take a view of those rivers, cascades, and mountains, that prompt so lively a recollection of his successive pleasures and pains, he will not want in Lapland abundant subjects for his imitative pencil. And although winter be unpropitious to his art, he will find what in summer will present a thousand objects to invite his attention, and an ample recompence for his patience. His imagination will be exalted to an extacy of a melancholy kind: a pensive sadness, not without its charms and usefulness.* That profound solitude and silence which every where reigns, will every instant suggest the question, to what good end do those places serve? To what purpose all that beautiful scenery of lakes, rivers, rivulets, and cascades, if those deserts are never, as would seem to be the case, to be peopled by human beings? This question will never be solved by man, while he retains the persuasion that he is the Lord of the creation, and so long as he indulges the idle and presumptuous prejudice, that every thing exists only for him. Those birds which make the woods resound with their song, which swarm in marshes, on rivers, and in the air, and which in summer retreat by a long continued flight to Lapland from all parts of Europe, in order to provide themselves with nests—have not those creatures a natural right of multiplying their species, as well as man? Persecuted every where else by human snares and industry, refined by fictitious wants and desires, ought they not to have an asylum where they may deposit the fruits of their loves?

* A melancholy turn of mind best fitted for love and friendship.—HUME.

To the enlightened philosopher Lapland presents throughout, subjects of reflection and contemplation*—no arts flourish here—you no where meet with temples, houses, wrecks of columns, or of other monuments. The antiquary walks forth amidst the ruins of edifices, that he may learn the history, and admire the actions of former times. In Lapland, the philosopher has an opportunity of studying among wandering tribes the first elements of social life; of society in its most ancient and primitive form—he comes not here for the purpose of admiring human productions, but for that of contemplating nature, the order and harmony which prevail in the creation, the fixed and unchangeable order of things, and the wisdom of Providence that is every where conspicuous; he comes for the purpose of enlarging in those deserts the bounds of his knowledge, of animating his piety, and preparing the way for improving his future happiness. What a journey is that to Lapland, to a traveller from the South ! What.

* It is an important question in natural philosophy, how far the opinion of Mairan, Buffon, Baillie, and others, concerning what they term *central heat*, is founded on facts. It is asked, was there ever a priod since the formation of the earth, when the regions of the North were warmer than they are at present? Can we suppose that there has been a change of climates, and that in the course of ages an essential difference has taken place in the temperature of the atmosphere? These queries would naturally present themselves to a person travelling in Lapland; but I am sorry to acknowledge, that I have met with nothing that might tend to answer them. So far I can say, that during the short space of time I was in Lapland, I did not discover any thing that could be considered as confirming so sublime a theory. I saw no hot springs, nor similar vestiges of a warmer temperature; nor did I perceive any traces of a greater population, nor any indications of very remote inhabitants, by remains of art, and fragments of antiquity.

other course of travels more adapted to produce reflections and lessons, that may redound to his well-being ! How great his advantage over travellers from the North, who, quitting the rigours of their native soil, come among us and contract, by the force of habit, a taste and passion for pleasures which their native country refuses ! They carry home the desire of enjoying such a climate and sky as that which they have left ; they feel privations every day ; they regret the want of those amusements, which are peculiar to a more refined state of civilisation, and to a more genial climate : they long for the gratification which is derived from the culture of science, and the perfection of the fine arts. But happiness is not essentially promoted by the mere recollection of those lost enjoyments. The traveller from the South, on the contrary, returning from the country which yields no such pleasures and advantages, hails with enthusiasm the bounteous sun, whose favourable influence and benign rays every where diffuse gladness, fertility, and plenty ; and if, on his return, he is so fortunate as to find peace and security universally diffused over his native country, and the empire of laws distributing justice and equal protection to the people : let him repose from all his labours and toils ; let him cultivate in the bosom of his family the civic virtues, anxiously cherish that science and civility which have so close a connection with virtue and humanity, and teach and assure his countrymen, that they are the happiest people in the world.

GENERAL
AND
MISCELLANEOUS REMARKS
CONCERNING
L A P L A N D.

GENERAL REMARKS

CONCERNING

L A P L A N D.

SECTION I.

Of some Writers who have given Accounts of Lapland, especially the Missionary Canute Lecms—The Author's Views in this part of the Work explained.

If a traveller were to confine his attention and his narrative to the particulars that actually meet his own eye, his discoveries would be bounded by a narrow horizon, and even in that compass his information would often be very imperfect. The origin, reasons, and various connections of things are frequently to be learned from others. It is therefore his business, not only to converse as much as possible with the natives, and all those who can afford intelligence, but also to consult written records. To swell a journal with extracts from books within every one's reach, and which all may understand, is a common but not a very equitable practice.

tice. The case is otherwise where the book, containing curious and useful information, is not known to the nations to whom the traveller addresses his work, and which, were they acquainted with its existence, would be intelligible only to a very small number.

In order to add authority to my experience, and enlarge my knowledge of the manners and customs of the Laplanders, I cast about to procure what assistance I could from various accounts, either printed or in manuscript, and in my researches I fortunately found at Drontheim, the capital of the province of Norway, which borders on Norwegian Lapland, a work but little known in other parts of Europe. This book professedly treats of the Laplanders inhabiting Finmark, who are subject to the Danish crown. The manuscript was drawn up in the Danish language by CANUTE LEEMS, who was ten years a missionary to the Laplanders, constantly residing amongst them, and a teacher of the Lapland tongue in the vicinity of Drontheim. It is dedicated to the present king of Denmark, Christian the Seventh, by whose command it was first written, and afterwards translated into Latin. This translation was printed at Copenhagen in 1767: it is illustrated by notes, chiefly, though not solely, relating to botany and natural history, by Gunner, Bishop of Drontheim, accompanied with a dissertation on the pagan superstition of the Laplanders, and upwards of ninety copper-plates. From the missionary's narrative, and also the bishop's annotations, I have introduced among my observations what appeared to be most curious and important.

There

There exists an account of Swedish Lapland, which in no respect differs from that of Lcems; but the reader is particularly cautioned by the missionary against another publication by an anonymous author, in the German language, entitled, *Nördische Reysē*, &c. which came out about the middle of the last century. This German writer makes the Laplanders a nation of magicians, and has filled his book with monstrous absurdities, and told the most egregious falsehoods concerning them. He asserts, that the Laplander calls his rein-deer to him by blowing a horn; and that when he is about to set off on a journey he whispers the animal in the ear, as if he was informing him of the way he was to go. Now the missionary absolutely denies that either horn or trumpet is known amongst the Laplanders, who make no use of any musical instrument whatever. As to the whispering in the animal's ears, the folly of such a statement is a sufficient impeachment of its veracity. The same person says, he bought a favourable wind with money and tobacco of certain inhabitants of Norland, who gave him a piece of linen rag tied in three knots, which he was to fasten to the main sail; and he adds, that upon loosening the first and second knots he had a favourable wind, but that the third caused a violent tempest. Our missionary totally denies the probability of the affirmation, though it may be admitted that the Lapland magicians formerly pretended to such power over the winds; for the same assertion has also been made by other writers. Our readers, who are admirers of Hudibras, will recollect, that Butler has an allusion to this superstition, which undoubtedly he

had met with in those authors, in the course of his extensive reading.

The missionary's book is published, very properly, in the Danish language, as well as in the Latin translation. For the barbarous Latin that the translator, though a great master of the Latin tongue, is obliged to use from the novelty of the matter (which even Cicero or Cæsar could not have expressed in pure latinity), would in many instances be unintelligible to good latinists, if it were not elucidated by the addition of the Danish.

The Laplanders, of whom an account is given by the missionary Leems, are the inhabitants of Finmark, making part of the prefecture of Drontheim, and belonging to the crown of Denmark. And these are said to differ in no respect in their manners, customs, and language, from the Laplanders belonging to Russia and Sweden, and manifestly to be one and the same people, though under different governments. In following our author through his work, I shall, in some instances, go over the same ground on which I have already slightly touched. But, where I do so, the circumstantiality of the missionary will afford a sufficient degree of novelty and interest, to prevent the unpleasant fatigue of repetition.

Some writers have described the Laplanders, not only as dirty, indolent, and immoderately addicted to spirituous liquors, but as a libidinous and cowardly race of people, covetous of money, and knavish in the acquisition of it. The missionary Leems shews a very laudable partiality for those people, who have been the object

of his pious labours, and among whom, according to his own account, he has passed many days of hardship, for the purpose of pointing out to them the road to salvation. He does not deny all that has been asserted in their disfavour, or rather, his mode of vindication shews, that however they may be improved in their manners, they were not always irreproachable. As to their inordinate passion for intoxication, whether by means of spirituous liquors or tobacco, he acknowledges and explains it, though even here his propensity to shade and extenuate their failings is obvious.

From what I have said concerning the assistance of which I shall avail myself in the following account of Lapland, the reader is not to imagine, that he has to expect nothing farther in the subsequent pages than a mere translation of the book alluded to. On the contrary, I have only selected from it such information as I found interesting and applicable to the present state of that country. This is interspersed with my own remarks ; and I have shewn in which points I differ from the statements of the author. Some of his assertions, which were not confirmed by my own observation, I have not introduced : and, lastly, I have inserted large communications* on the natural history of Lapland, accompanied by some plates ; which, I trust, will be received as an acceptable present, by those who cultivate that important science. It would,

* Chiefly what is said on the birds, and other animals of Lapland, and the entire sections on insects, botany, and mineralogy ; also the last section, which contains some general observations relative to meteorology and natural history.

however,

however, be an act of injustice, if I claimed the merit of the last mentioned additions as entirely my own ; and I therefore acknowledge with grateful pleasure the obligations I owe to several literary gentlemen for their liberal assistance. Dr. Quenzer, of Stockholm, furnished me with the list in the branch of zoology ; by the kindness of Mr. Paycul, of Stockholm, and Professor Thunberg, of Upsala, in granting me free access to their valuable collections, I was enabled to form a catalogue, and to take drawings of many curious objects. Here I cannot omit mentioning the name of my friend Lieutenant Gustavus Brandel, who, being a proficient in the art of drawing, rendered himself very useful to me by his aid and good advice. For the list of the indigenous plants of Lapland, I am indebted to the goodness of Professor Swartz, a name too well known to need any commendation from my pen ; and for that of the minerals my thanks are due to Mr. Hyelm, inspector of the museum of minerals, and master of the mint, at Stockholm, a gentleman not less distinguished by his accurate knowledge, than by the simplicity and politeness of his manners, and his readiness to assist the inquisitive in the pursuit of science.

SECTION II.

Of the Origin of the Laplanders.

FROM whence the Laplanders derive their origin they themselves are wholly ignorant. The most general opinion is, that they are descended from the ancient Finni, or Finns, and this supposition appears to our missionary, as it must to all men of sense, more probable than the notion of those who deduce their descent from the ancient Hebrews. The coincidences, on the strength of which the advocates for the Hebrew origin support their opinion, the missionary thinks it worth while to detail at some length. I shall extract the principal of them, not from any idea that they are worthy of serious attention, but merely for the purpose of adding a few to the many examples which are already before the world of the fancies and conceits of etymologists.—“ In “ the first place, the Laplanders generally have black hair, so have “ the Jews; the Jews are of small stature, so are the Laplanders: “ Saturday was consecrated to devotion among the Jews; so it “ was also, before the introduction of Christianity, among the Lap- “ landers: the manner and modulation of the voice in singing the “ psalms in Lapland is very like that of the Jews in their syna- “ gogues: the Jews, when they offered up sacrifices to God, were

" wont to eat the greater part of the offerings themselves; so
" also did the Laplanders in sacrificing to their idols—they con-
" sumed the flesh themselves, leaving nothing to their divinities
" but the bare bones: it was the men who were the cooks among
" the Jews; so also it is the men, not the women, who are the
" cooks among the Laplanders. Some of the Jewish laws re-
" specting the physical condition of women were anciently ob-
" served also by the Laplanders."

The missionary observes, that there are many coincidences in the manners and modes of life of the Laplanders and the ancient Scythians. The garments of the Laplanders, like those of the Scythians, consist in the skins of wild beasts. The Scythians, like the Laplanders, neglecting agriculture, had no fixed habitations, but wandered about with their wives and children from place to place, and derived their subsistence from their herds of cattle. Our author also remarks very striking affinities between the languages of ancient Scythia and Lapland: for example, *thunder*, which the Scythians called *terami*, the Laplanders express by *tiermes*.

The missionary has nothing to object to the general opinion that the Laplanders were originally of the same race with the Swedish Finns or Finlanders; an opinion founded on a striking similitude of names and other circumstances. But, after granting that the Laplanders and Finns may probably have been once the same people, and that the marks of discrimination now existing between them may have been gradually brought on by the course of

of ages, he thinks himself justified in comprehending under the name of Laplanders all the people dwelling upon the coasts of Finland and Norland, who lead a pastoral life, like the other inhabitants of Norway, as well as those families which wander about from mountain to mountain with their reindeer.

With respect to the point in question, namely, the descent of the Laplanders from the Scythians, afterwards called Tartars, the Bishop of Drontheim, in his Annotations, observes, that the Finns, the nearest ancestors of the Laplanders, are mentioned by Ptolomy, the geographer, and by the Roman historian Tacitus, whose description of the Finns, the Bishop might have added, is applicable in the most striking and important instances, to the mountain Laplanders, and the shepherds of Norland and Finmark of the present day.

The Bishop, while he considers the Laplanders and Finlanders as originally the Finns or the Finni of Ptolomy and Tacitus, supposes the Finns themselves to be descended from the Scythians or Tartars, and from that tribe or nation of Tartars known by the name of Samoeids. The Norwegian, Swedish, and Russian Laplanders, he holds to be the same people.

The Finlanders, or Finnish Laplanders, are offended, Bishop Gunner tells us, at being called Laplanders. This he accounts for with Scheffer; by supposing *lap* to be a term of reproach.*

* The Laplanders seem to have been known to Herodotus and other ancient writers, who have given them the names of Cynocephali, Troglodytes and Pygmies. It is supposed that their present name was given to them by the Swedes, who made the first and principal conquest of their country. It is said to be de-

The Bishop supposes that the Laplanders were most probably the earliest inhabitants of Sweden and Norway, and the first adventurers from Scythia, being driven from the southern parts of Scandinavia into those dreary deserts by subsequent hordes, who overran the districts of the west and south, seeking for room and subsistence. Not only their manners and customs at this day discover pretty manifest traces of their Scythian origin, but those dismal regions lying towards the Frozen Ocean, from the Russian province of Kamtschatka, are still inhabited by a race of men similar to the Laplanders, and who, like them, may have been forced back into the rude retreats of freedom, long before national records and credible history.

rived from one of these three Swedish words: *lapp*, which signifies a wolf; or *lappa*, which denotes a bat; or lastly, *lapa*, which means to run. There can be no absurdity in adopting, on the hypothesis of the Bishop of Drontheim and Scheffer, either of these etymologies. The clothing of the Laplanders justifies the first, their ill-favouredness the second, and their wandering manner of life the last.

SECTION III.

Of the Language of the Laplanders.

THE language of the Laplanders appears to be wholly distinct and separate from all others, excepting only the Finnish, to which it has some analogy; not, however, so great as that which the Danish bears to the German. It is distinguished by certain peculiarities resembling the idiom of the Hebrew. But the missionary does not take it upon him for that reason to say that it is derived from the Hebrew. He refers to the preface of a Laplandish grammar, which he had published, for an account of certain words and expressions, which seem to indicate a derivation from the Greek and Latin. But he admits that it does not hence follow that those words are actually Greek and Latin, transferred to Lapland: they may, notwithstanding that similarity, belong to the genuine and native language of the Laplanders; and although the Lapponic contains many terms nearly similar to the Finnish and Danish, or, more properly speaking, the Norwegian or Norsk, yet it differs so much from those languages in the general elocution and mode of expression, that if, in pronouncing certain words, the Laplander, Finlander and Dane were each of them to use his own vernacular dialect, they would not understand one another.

The Lapponic tongue has been so little attended to by foreigners, the missionary observes, that it is hardly understood even by the Norwegians bordering on Lapland; although it is not less worthy of being reduced to fixed grammatical rules, and rendered intelligible to other nations, than the other living languages of Europe. It is particularly recommended by an elegant brevity, which expresses in one word what in other languages would require several. For example, *my little loaf* is expressed by the single Lapponic word *lacbatzhiam*. This term *lacbatzhiam* is analysed in the following manner: it is made up of the noun substantive *laibe*, a cake or loaf; the diminutive *atz*; and the pronoun *am*, which signifies *mine*. The Lapponic admits of a commutation of consonants, namely of the labials B and P, B and M, F and V; the gutturals G and K; the dentals S and Z; the linguals D and N, D and T; the labial letter F, and the guttural K, are also exchanged with one another: the letters *gn*, joined together in the same syllable, are pronounced with an aspiration.

The missionary, in farther illustration of the genius and character of the Lapponic, goes at very considerable length through all the parts of speech of which it is composed, viz. noun, pronoun, verb, preposition, and the particle. There are but few of my readers, I presume, who would thank me for following that author through the whole of his dissertations on the elements of the Laplandish tongue; and I shall content myself with the statement of a few particulars that probably will not be unacceptable.

The first ten numbers in the Laplandish table of notation are—

Auft	-	1	Gut	-	6
Gouft	-	2	Zhieezhia	-	7
Golm	-	3	Kautze	-	8
Nielja	-	4	Autze	-	9
Vit	-	5	Laage	-	10

It appears to be a singularity in the language of Lapland, that the names of fluids, metals, minerals, grain, herbs and fruits, are all of them expressed only in the plural number. It abounds in diminutives, which contribute to give that language both grace and energy of expression.

When a Laplander addresses a Norwegian peasant, he says, *passevelje!* that is, my companion! my friend! If a woman, *paf-seooabba!* that is, holy sister!

The rein-deer, held in the highest estimation, and which are supposed to be of the greatest value among the Laplanders, are such as are castrated. These excel the others both in size and fatness, and are of extreme utility and advantage to their owners. Hence such phrases as this: speaking of any one whom they think worthy of the very highest degree of praise, they say, *uertzejetz*, or, *he or she is absolutely a castrated rein-deer*. When a certain Laplandish and rustic officer of the peace, or magistrate, in the Norsk called *lermand*, of the name of John Porsanger, was in an elevated and boasting mood, he was wont to exclaim, *Heerge zhiouga, I am a castrated rein-deer*.

Of a pregnant woman near her time, they commonly say, *Niffon læ kietziembeii in*, that is, being interpreted literally, *The woman is*

is in the days of inspection, which means, that she is in a condition that both requires her to be careful of herself, and to be attended to by others.

On the subject of proverbs or adages, in which the language is by no means rich, I must not omit to mention one common among the Norwegian rustics of Finmark. When they would give the sincerest testimony of commiseration and grief at any misfortune or calamity, be the condition of the sufferer ever so distinguished or exalted, they exclaim, *Beiste flakkar*, that is, *Poor beast*; an expression which conveys to them the liveliest sense of compassion and sorrow.

SECTION IV.

Of the exterior Appearance and bodily Constitution of the Laplanders—Their Habits and Mode of Life—Their religious and moral Character.

THE children of the Laplanders are remarkably fat and chubby, which appears not only in their faces, but other parts of their bodies. This disposition to increase in flesh, however, is less perceptible as they grow up. The Laplander is of a swarthy and dark complexion, his hair is black and short, his mouth wide, and his checks hollow, with a chin somewhat long and pointed: his eyes are weak and watery, which in some degree proceeds from the constant smoke he endures whilst at home, in his tent or hut; and may likewise be attributed to the snows which, during winter, are constantly driving in his face, whilst he is abroad and engaged in hunting upon the mountains, which afford him no object to fix his eyes upon but what is glaring with whiteness. That this weakness of his eyes proceeds from these causes, and especially the latter, is highly probable, from the circumstance that a man often loses his sight for several days after his return from hunting.

The Laplanders have been represented by some authors as being overgrown

overgrown with shaggy hair, like wild beasts. Others have given them but one eye: but these are fables which those authors seem to have borrowed from Herodotus* and Pliny, and in no way applicable either to the Laplanders, or any race of people upon the face of the earth. Others again have asserted, with a greater appearance of truth and justice, that they had from nature an offensive smell. It must indeed be acknowledged, that there is a certain unsavoury rankness which attends the Laplander, more than is commonly found with the inhabitants of other countries; but this is not so much to be imputed to his natural temperament as to his mode of life, dwelling as he does in a hut or tent, in the midst of a constant smoke, and clothed in a dress which has imbibed quantities of dirt, grease, and train oil.

* The origin of this story of people overgrown with hair, who had but one eye, like the Cyclops, is as old or older than the time when Herodotus wrote his history. He speaks of certain Cyclops called Anmaspi, inhabiting the northern parts, who waged perpetual war with dragons or griffins, in possession of mines of gold. The notion of these Cyclops is supposed to have arisen from the interpretation of the Scythian word *anmaspos*, which signifies one eye. It has been thought by some that the Anmaspi were a Tartar nation, into whose country the Chinese (whose ensign is a dragon or griffin) made frequent inroads for the purpose of seeking for gold, which they carried away with them. As to the peculiarity of the natives of Lapponia in respect to hairiness, it has been supposed to allude to their wearing furs in the winter for an outer garment. Herodotus likewise speaks of men who, at particular seasons, were changed into wolves. This certainly had no other foundation than in the depraved fancies or impositions of sorcerers, who pretend to a power of transforming themselves into wolves, and perhaps, to carry on the deception, disguised themselves in the skins of those animals. This belief has remained to later ages, and has left its name behind it, being called *werewolf*, by the Germans *währwolf*, and by the French *loup garou*.

The Laplanders are for the most part short in stature, but they possess a tolerable share of bodily strength. They are certainly a very hardy race of people, and are able to undergo great labour, and actually support themselves under the extraordinary severity of their climate with a wonderful degree of patience and fortitude. In proof of this our missionary mentions the instance of a woman who crossed mountains of ice and snow in the month of December, five days after her delivery of a child, in order to attend the prayers of what is commonly called churching. The mountain Laplanders, and those of the sea-coast, or the maritime Laplanders, are equally objects of admiration in this respect, that they are able to breathe amidst the suffocating smoke of their tents and huts, when the only aperture by which the smoke can pass is closed, in order to keep out the weather; and as it has been observed that the Laplanders are by nature and from habit able to endure great hardships, and sustain excessive labour with patience, so it has been long since remarked, that the most simple medicaments, which elsewhere are little esteemed, have sufficient efficacy to restore them to health, unless their disorders are of a very violent nature. This truth is established by long experience, and seems as if Providence, in compensation for their inability to procure extraordinary assistance, permitted the same effects to be produced by the most common means. They set a high value on spices, and no present is more acceptable to a Laplander than that which either consists of tobacco, pepper, ginger, and the like, let the quantity be ever so small.

They possess a degree of agility which is really wonderful, and their bodies are supple and pliant beyond conception. It is surprising what a number of them are able to stow themselves within a space which we should not imagine would hold half or one third of that quantity. They will sit in the closest contact with each other, their bodies supported by their heels, or their entire weight bearing upon the toes. The American Indians, or savages as they are termed, use the same posture, and the ingenious historical painter, who has represented the treaty of the great Penn with the Indians at the settlement of that flourishing colony which now bears his name, has not omitted to embellish his picture with the figure of an Indian in this extraordinary attitude.

The Laplanders descend the steep sides of a mountain, when covered with snow and ice, with incredible velocity. They make use of a particular kind of snow shoe, differing greatly from that which bears the same name in the northern parts of America : it is a piece of wood of some length, curved before, and turning upwards behind, to the middle of which the foot is fastened ; and whereas the snow shoe is calculated for security to prevent a man from sinking into the snow, this wooden shoe or skate, called in the Danish tongue *skie*, answers the purpose both of security and expedition. Accordingly the Laplander slides along with such swiftness, that the air whistles in his ears, and his hair becomes erect with the motion ; and yet so dexterous is he in the management of his body, that by his impulse ever so violent, he can take up his cap, if he chances to let it fall, or any thing else that hap-

pens to lie in his way, without stopping his course. The children, as soon as they are able to walk, climb up the sides of the mountains, and exercise themselves in the use of these skates.

When they travel with their reindeer, the celerity of their pace can only be conceived when seen: they drive with equal expedition up the top of mountains and down them, insomuch, that the vibration of the reins upon the backs of the reindeer is scarcely perceptible to the eye. The Laplanders on the coast are exceedingly skilful in the management of their boats. Our good missionary supposes this extraordinary agility of the Laplanders to proceed in a great measure from the train-oil, which from their birth constitutes a principal part of their food. But the fact is, that from their infancy they are practised in feats of activity and bodily exertion: they learn to ascend the mountains, to carry heavy loads of timber, to hunt the wild, and to follow the tame reindeer for considerable distances. In this manner they also become inured to suffering every degree of heat and cold with patience. It is chiefly by the exercise of hunting that they are rendered swift of foot, and their agility is favoured by the smallness of their stature. They are content with little, and have minds incapable of being affected by those passions, which prey upon and destroy the bodies of a great part of mankind. They sleep equally on both sides,* and do not accustom themselves to retire to rest be-

* *In utramvis dormiunt aurem, nec plumis indormire mollibus magni estimant,* are the words of the Bishop of Drontheim, from whom this particular is borrowed. It is to be observed, that in Germany, Denmark, Sweden, and Norway, it is usual to sleep on one feather-bed, and to have another over it instead of blankets

twixt two feather-beds, as their more civilised neighbours. Their avocations do not disturb the natural flow of their animal spirit, nor do they weaken their body by the labours of the mind : it must of necessity follow, that they are strong, healthy, and active.

Some of the Laplanders are very expert in carving in wood or horn, though they use no other tool than a common knife ; with this they make many little utensils, such as cups, spoons, &c. as will be more fully explained in a subsequent section. Their sledges are of their own construction, and so artificially put together, that not a drop of wet can penetrate them. The women are very skilful in ornamenting belts with tinsel wire, and some of them, like the men, excel in carving upon wood or horn. These people are very dexterous in the pursuits of the chase, as will be shewn hereafter. Their only weapons were formerly bows and arrows ; but they now make use of fire-arms, and are become good marksmen.

The missionary records, as a principal virtue of the natives of Lapland, their great attention to the duties of religion, and their serious devotion when assembled at divine service. He speaks of the patience with which they sit bareheaded in the severest frosts, for three hours together, to hear the word of God delivered to them under tents, which are by no means sufficiently secured against the current of an extreme cold air. It appears, that at and quilt ; and these two feather-beds are most commonly of the finest and softest down. Some physicians recommend sleeping on the right side, or right ear ; the good bishop seems, however, to think, that to sleep casually on either ear is the most conducive to health.

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the commencement, and during the earlier part of the last century, the Laplanders were immersed in the darkness of paganism, and without the least tincture of letters. It was Frederick the Fourth, king of Denmark, who ascended the throne in 1619, that first began to introduce the light of the gospel amongst them. For this purpose he established a religious mission, which has been continued by his son, Christian the Sixth, Frederick the Fifth his grandson, and Christian the Seventh, the present sovereign, his great grandson. They are now, as Mr. Leems tells us, well instructed in the Christian religion, and have the New Testament in their own tongue. The missionary mentions with rapture the names of some Laplanders who could repeat by rote the whole catechism, and large portions of the gospel, with a part of the psalms, both in the Lapland and Danish tongues ; particularly a venerable old man of seventy years of age, who was able to recite a great part of the catechism, though he never knew a letter in his life, nor had ever committed any thing to memory before. This instance of the power of memory does not appear at all incredible. The Arabs, and other pastoral tribes, who are in the habit of amusing their leisure by telling and listening to tales, will remember them though very long, and rehearse them with great fidelity, after one hearing. It is conjectured by Julius Cæsar, that one of the chief reasons why the ancient Druids did not commit their instructions to writing was, that their pupils might impress them better on their memories. It was the opinion of Socrates, as appears from the Phædo of Plato, that knowledge was

more

more easily gained, and longer retained when delivered by word of mouth, than when communicated in writing. It would seem that the ear is less distracted than the eye ; that the intenseness of the mind is greater in hearing than in seeing. The missionary adds his fervent wish, that his fellow-labourers in this vineyard of divine truth, would qualify themselves for the work, by acquiring a thorough knowledge of the Lapland tongue, so as to preach and pray in it to the Laplanders, as not many of the men have a knowledge of the Danish language, further than the use of a few words and phrases, which occur in the course of traffic ; and of the women, not one is the least acquainted with it.

The Laplanders hold the missionaries sent amongst them in the greatest esteem, and shew them much respect. They salute them with great reverence whenever they meet them, and give them precedence upon all occasions. They make them frequent presents of what are reckoned in Lapland peculiar dainties, such as frozen rein-deer's milk, with the tongue and marrow of that animal. They are very attentive to keeping holy the sabbath-day ; they abstain from cursing and swearing, which are common vices among the inhabitants of Norway, and they lead a religious and moral life. Whoredom and adultery are sins rarely committed ; and the crime of theft is little or not at all known amongst them ; so that locks or bolts, for the security of property in Lapland, are entirely unnecessary. Norway swarms with beggars, but begging is unknown amongst the Laplanders. If any one, from age or infirmity, should chance to be in want, he finds his necessaries

amply and instantly supplied, and charity appears unsolicited with open hands. The missionary, however, admits, that the Laplanders are not entirely exempt from those vices which ever prevail more or less amongst mankind in a state of society. They cannot resist the temptation of ebriety, and yield to the allurements of avarice. They will get drunk, like the men of other countries, when strong liquor comes in their way; and cannot avoid cheating, like other dealers, when they can do it without danger of detection. The skins of the reindeer are more or less valuable, according to the season in which they are killed. If the animal be slain in the spring, his hide is found perforated by an insect which buries itself in it, and lays there its eggs; but it is otherwise with the reindeer killed in the winter. To defraud the purchaser by trying to obtain the same price for a defective skin as for a perfect one, the Laplander artfully closes up the holes in the skin; and, in order to impose upon the credulous trader, will not scruple to warrant it free from defect, and assert that the beast was killed in autumn; though he well knows the case to be quite the reverse; that the skin is full of holes, and the deer was killed in spring, or the worst season.

SECTION V.

Of the Dress of the Laplanders, both Male and Female.

SOME writers have affirmed, that the Laplanders wear dresses ornamented with gold and silver; others again have as confidently asserted, that their clothes are made with the skins of seals and bears, and shaped in a manner to give them the appearance of walking in sacks. But these accounts are not to be regarded, and are as foreign to the truth, as that of a writer, who declares the women in Lapland make use of veils wove of the sinews and entrails of wild animals.

Mr. Leems begins his account of this matter with describing the dress of the man: on his head he wears a cap of a conical shape, resembling that of a sugar-loaf. These caps are generally made of red kersey cloth, and formed of four pieces, broader at bottom than at the top, where they meet in a point: betwixt the joinings of the four pieces a stripe of yellow kersey is sewed, marking the divisions; and to the top of the cap is fixed a tassel of shreds of different coloured cloth. The lower part of the cap has a border of otter's skin; but the Russian Laplander trims his in a more expensive manner, with ermine.

Sometimes the border of these caps extends to some length before

fore and behind, and ends in a point ; and a cap thus shaped they call in their own language *nindne kapperak*, which means a cap with a nose. The missionary says, he saw once a cap which belonged to a poor Laplander, and was made of a salmon's skin ; it was white, and had square divisions, which were visible where the scales had dropped from the skin.

They wear a sort of riding-hood, called by them *rivok*, which they use in hunting, or in attending the tame rein-deer whilst feeding. This hood has only a small opening to look through, is close sewed up before, and when it is put on the head covers the breast and shoulders : in front there appears a flap, which is called *zhialbme-raft*.

The men in Lapland very rarely wear any covering about their necks, or whenever they make use of something like it, it consists of a narrow piece of cloth, which only goes once round ; so that their throats are always exposed naked, or nearly so, to the severity of the weather.

The tunick, or close garment, worn by the Laplander, is called a *tork*, and is made of sheep's skin with the wool on, the woolly side being inwards : it has a high collar, made stiff with kersey, or other cloth, neatly worked with different coloured threads, and extending a little way down the bosom. As this tunick at the same time serves for a shirt, it has no opening but where it covers the breast ; and it is more or less ornamented, according to the condition and fancy of the wearer, with cloth in like manner as the collar, and bordered with otter's skin. On the left side, in front,

is sewed a narrow stripe, or border of cloth or fur ; and on the right, especially on the woman's tunick, small silver knobs gilt : the cuffs of the sleeve are likewise covered with a border of kersey, or other cloth, edged with otter's skin : a border of the like kind with that round the breast and cuffs of the sleeve is sewed about the bottom ; and, as the woolly side of the skin is turned inwards, the wool from within is seen hanging below the border. This garment, thus fully described, is worn by the Laplander next his skin, and, as has been already observed, instead of a shirt.

The upper coat used by the men is made of kersey, or some such coarse cloth ; or otherwise of the skin of the rein-deer, either old or young, of a grey colour. This part of the dress is called by the Laplanders *kaste*, and is provided, like the tunick, with an upright stiffened collar, extending to the chin, and surrounding the neck. This collar is worked with threads of different colours, in a very neat manner. The coat, as the tunick, is open only at the breast, and bound like it with kersey, or some other sort of cloth of various colours. On each shoulder is a kind of band or epaulette, cut in different forms, and of the same stuff. The lower extremity of this coat is worked in figures with various coloured threads. This border, or fringe, is called in the Lapland tongue *luskuldaik*. To tie the collar close about the neck, a running string is used. The collar, the opening at the breast, and the shoulder-band, are all formed of slips of various coloured cloths, and worked with threads of different hues : the cuffs of the sleeve are ornamented in the same manner ; the bottom

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of the coat has likewise a border extending round it, and of a different colour ; for example, if the coat be of red kersey, the border is yellow, green, or white. The Laplander has no pocket to his upper coat, but instead thereof carries a little bag, hanging over his breast, in which he puts his implements for lighting a fire, which he is never without, and other things of constant use ; and this bag he calls his *ninfak-gierdo*.

The cold in this part of the world, during the winter, is most intense. A single instance of it will be sufficient to illustrate this, namely, that the lakes and rivers are generally frozen to the thickness of two Danish ells and an half. It must, however, be remarked, that when there is much snow upon the ground, the frost does not penetrate so deep. It is on account of this extraordinary degree of cold, that the Laplanders are under the necessity of covering their bodies with furs and rough skins of different animals. The upper coat, made of the skin of a full grown reindeer, is called by the natives *paeſk*. But the skin of the female is generally preferred for this purpose, and worn with the hairy side turned outwards, which gives the coat a rugged and uncouth appearance. These fur garments are not left open at the breast, but are made intire. Round the neck is a border of skin with the hair on, called the *paeſk-lok*. Two thongs of the reindeer hide, with tuſſels of shreds of different coloured cloth, serve to bring the coat close to the shoulders. This coat has likewise a high stiff collar, made of the same skin, with the hair on. The use of this upper coat is as a defence from rain ; and if it be worn, as it

often is, at sea, and chance to be wetted with salt water, the Laplander, immediately on coming on shore, rolls himself in the snow, to prevent the coat from being damaged by the salt-water.

The mountain Laplanders, by way of protection against the severity of the weather, constantly wear about their necks, whilst they travel, the skin of a fox's cub ; observing always to let the tail rest on one shoulder. When the Swedish merchants make a journey over the mountains, they tie a marten's skin about their necks for the same purpose, and, to ornament it, have pieces of silver fixed "in those holes where eyes did once inhabit." An upper coat, made of the skin of the fawn of the rein-deer, is called by the Laplanders *moedda*; the shape is the same as that made from the skin of the full grown one ; but it has a border round the sleeves, and is bound at bottom with a fringe of black dog's skin. The fur coats which the Lapland women prepare for sale to the richer part of their countrymen, are made of the skins of young rein-deer of a grey colour, and have the opening at the breast covered with a border of otter's skin. The lower extremity has trimming all round of black dog's skin. From the bottom upwards, on each side, is a piece of skin, cut in the shape of a wedge, sewed upon the coat. It is to be observed, that all the borders of the breast and neck, with the other parts of the coat, which are of cloth, are wrought with tinsel wire in various figures, according to the taste of the purchasers.

The men sometimes wear tanned leather gloves, which they call *rappakak* ; but most commonly they use gloves made from the

the skins of the fawns of the rein-deer, the fur side outwards ; and in order to keep out the cold more effectually, lined within-side with cyprus grafts. The women make a better sort of gloves for sale, which are worn by Laplanders of distinction : these have the part covering the hand formed from the skin of the black fox, or rein-deer's foot, with the fur on the outside : these gloves reach over the wrist, and some way up the arm ; the upper part of the glove, which touches the arm, is made of cloth curiously wrought with tinsel wire, and trimmed with otter's skin. Many Laplanders, male as well as female, wear copper bracelets about the wrist, which they fancy have the virtue of preserving them from pains in their limbs.

The men do not use stockings, but instead of them a sort of pantaloons, which closely fit the thighs and legs. They are made either of kersey or other coarse cloth, or of tanned leather, and sometimes of the skin of the rein-deer's legs. Those made of kersey or other cloth, have a patch of skin sewed on them at the knee, to render them more lasting ; the others, of tanned leather, are called *fjälekak*, and are chiefly intended for the water. Some of skin and leather, that is, the fore part leather, and the hind part skin, are called *kamas busack* : these are commonly used on land, and worn over the pantaloons of kersey or coarse cloth.

The shoes of the Laplanders have but one sole, which is sometimes taken from the skin of the rein-deer's head ; the upper-leathers and the ankle-piece are from the legs of the same animal. This sort of shoe is much used by the mountain Laplanders, and

called *gallokak*. The hair is left upon the skin, and worn on the outside of the shoe, which would render it slippery to walk with, especially on the ice, unless the people had the precaution to singe the hair, and thus by giving it a more uneven surface, make it susceptible of friction. This is the more necessary for children, who would otherwise meet with many falls and accidents. There are shoes which have soles of sealskin, and the upper-leather of some thinner sort, either tanned or untanned. This kind of shoe is chiefly worn by those who are much on the water. The Laplander makes use neither of buckle or latchet, but fastens his shoes with a thong twisted round his ankle. The better to preserve his feet from the cold, he fills his shoes with straw or rushes. As his pantaloons do not reach down to his heels, his foot is consequently put into the shoe naked. The straw and rushes are therefore carefully disposed withinside the shoe, and at night taken out to dry, that they may be fit for use the next morning; and when this lining will serve no longer, a fresh one is sought for.

The Lapland women make a kind of boot for sale, the sole of which, as well as the upper-leather, with the heel-pieces, are composed of the hide of the rein-deer's legs, with the hair outwards. The other parts, such as the inner sole, the legs, and the knee-tops, are of cloth, the latter being neatly worked with tinsel wire. These boots are fastened above the knee with a strap, from which hangs a tassel made of shreds of cloth. The toe of this sort of boot, which is called by the Laplanders *sacpokak*, ends in a sharp point.

The men wear leathern belts ornamented with tin, to the fore part of which is fastened a pouch, which holds tobacco for chewing. To the hinder part of the belt several thongs of leather are attached, ornamented with tin balls, keys, and other things. A knife in a sheath is also stuck in the belt, and a number of rings are hanging down by thongs of leather. The women make belts for sale, worked on the outside with tin, and lined with skins.

We have thus fully described the dress of the male Laplander, and shall now proceed with that of the female.

The Lapland women wear caps, sometimes of woollen, but oftener made of linen. The woollen caps are of kersey or other cloth, and are put together with two pieces, one of which covers the hinder part of the head and neck, the other the temple and forehead. Along the seams of these two pieces a stripe of yellow coloured cloth is sewed: the lower part of the cap is trimmed with yellow or white tinsel, or some other border of a showy nature; or wanting that, one of cloth of a different colour supplies its place: it has likewise a tinsel ribband, of a gold or silver colour. The missionary speaks of a poor Lapland woman, who had her cap tied with a bandau of the skin of a salmon of a white colour; but which in other respects resembled those before described. The linen caps differ from those of woollen, among other things, by being bordered with more elegant stuffs.

Before the Lapland woman puts on her cap, she adjusts a round knob or button, which is on the top of it, and, having put the cap

on her head, fastens it to the said button, or under it, with a string.

The women wear likewise on a journey, or when they are watching their rein-deer by night, a covering which consists of two parts ; the first of which is of one piece, and protects the head, neck, and shoulders, inclosing likewise the chin : it is made of red, blue, or green kersey, bound at bottom with a stripe of cloth of a different colour ; over this, to wrap up their heads more completely, they put a high cap, shaped like a crown, broader on the top, and lessening towards the opening without, and on the left side it has a band of a different coloured cloth, or sometimes instead of this a strap covered with tinsel, having a ball of silver gilt fixed to the end.

The tunick and upper garment worn by the women, differ little from those of the men : the tunick is made of sheep's skin, with the woolly part turned inwards, and varies from that of the men only in being gathered in plaits behind and before, but longer and closer on the breast, and coming down a little lower than the hips, whereas those of the men descend below the knees. This tunick, as that of the men, serves instead of a linen shift. The upper or outer garment is made of kersey, and is distinguished from that worn by the men in these few particulars only : the woman's extends below the knees, the man's comes no lower than the thigh ; the latter has a high stiff collar, the former has no collar at all. The woman's sheep skin tunick, however, has a high stiffened collar which covers the neck and ears, and appears above the

the outer garment of cloth, which, as has just been mentioned, is without any collar. The women have another kind of upper garment, called *barve*, made of kersey or coarse cloth, but different from the other already spoken of, as this comes no lower than the middle, is gathered round, and lies in folds about the body. The upper coat of rein-deer's skin, or its fawn, resembles that of the men in every respect, except that those which the men wear come down to the heels, whereas the women's scarcely reach lower than the knees.

The gloves of the Lapland women are alike in shape to those of the men; some of them are white, made of the legs of the rein-deer's skin, the hair outwards, ornamented with slips of cloth of various colours, sewed on them. The pantaloons of the women, like those of the men, serve instead of stockings, and are made of kersey or other cloth, or of skins from the rein-deer's legs, but very seldom of tanned leather. The women's shoes are always made of the skin of the rein-deer's legs, with upper-leathers of the same; those of the mountains preferring skins of a white colour.

The belts or girdles of the women are of leather or cloth, embellished with plates of tin: from the girdle hangs down a smaller belt, ornamented with bras, which has a number of different little things, and among others, brass rings hanging from it: the better sort of women have girdles bedecked in like manner with silver. The women wear over their shoulders kerchiefs, or mantles of Russian linen, or of cotton, sometimes white, and sometimes printed in colours: they also make use of narrow aprons of Russia

linen or cotton, white or printed ; the white always furnished with a fringe or border.

The women of Russian Lapland wear silver ear-rings, and sometimes silver collars, which go round their necks, and are connected with the rings in their ears. There is so small a difference betwixt the male and female dress in Lapland, that the good missionary tells us, he has frequently known man and wife change habits through mistake, the man putting on the woman's, and the woman the man's clothes.

The dresses so fully described, of cloth, furs, and skins, the gloves, shoes, and other articles, it must be observed, are the sole labour of the women, the men in Lapland undertaking the œconomy of the house, in cooking, and other matters, which in other countries are performed by women ; differing in this from the rest of the world. Several utensils of wood are also made by the women ; and the best sculptures of Lapland are the workmanship of the female sex.

SECTION VI.

Of the Habitations of the Laplanders, and their domestic Arrangements.

THE huts of the maritime Laplanders, or those who dwell on the coast, are called *laume guatte*, and are constructed with four posts bent together in an oval form, with a small door, and an opening in the roof to let out the smoke. The roof of these huts is formed with the bark of the birch-tree and sods of earth. To enter them it is necessary to stoop almost double, and within there is no possibility of standing erect, except perhaps in the centre, where the fire is made, which is exactly under the before-mentioned smoke hole. To retire even a step from the fire-place towards the side of the hut is impossible, unless the body is quite bent down. The family, however, are all seated round the sides, not minding the inconvenience of stooping. The whole inner space is covered with boughs of trees. In the middle of the hut two piles of stones are raised in a rude manner at an equal distance, parallel to each other, in a direction from the door to the opposite end of the hut: this is for the fire-place; at the four extreme corners of which are fixed as many posts: these posts serve to support a frame, on which projecting pieces of wood are fast-

ened, in the shape of hooks or cranes, for bearing the pot or kettle suspended over the fire.

Before the Laplanders retire to rest, they are careful to put out the fire, and after the hut is clear of smoke within, they climb up the roof, and place a board over the hole.

It has been already observed, that the hut is divided in the centre by two piles of stones, in order to form a fire-place. This division is extended towards the door and the further end of the hut, by means of four logs of birch wood of a due length being added. This preserves two vacancies in the centre, besides that for the fire. That towards the door is used as a receptacle for fire wood; that at the further end beyond the fire is the place where the kettles are kept, and the copper vessel holding the snow water to drink. There then remain two spaces towards the sides of the hut on the right and on the left of the fire-place: these are each divided into three partitions, by logs of wood; the first next the door, reaching to where the fire-place begins; the second occupying the extent of the fire-place; and the third taking up that next to the separation where the pots and kettles are placed. These partitions in the hut may be styled the bed-chambers; for in them the family sleep in the order which shall immediately be explained.

Each of these compartments or divisions has the skin of a reindeer for a carpet, that no uneasiness may be experienced in sitting or lying down, from the branches which have been spread upon the ground of the hut. When the Lapland household retire to

rest, the following is the order of the beds: if only one family occupies the hut, the husband and wife take up one side with its three divisions; the other side is then assigned to the children and servants. If, on the other hand, the children and servants are obliged to sleep on the same side with the master and mistress, the order of the beds is in that case thus arranged: the husband and wife take the end farthest from the door, which is esteemed the most honourable, and called the *boshio-kiaefhie*; the children sleep in the middle partition, or, as they name it, *gask-loido*, next the fire-place; and the servants occupy the division near the entrance, or the *urfa-kiaefhie*.

If a missionary happen to take up his night's lodging with them, the best or principal bed-chamber, the *boshio-kiaefhie*, is given up to him, and the man and wife quit the hut, and this is the case as long as he chuses to stay with them.

When two families occupy the same hut, the fire, the vacancy towards the door wherein is placed the wood, and the space opposite to it at the further end for the pots and kettles are in common to both families: yet it very rarely happens that any dispute or quarrel arises betwixt them; and these simple people set an example of cordiality and brotherly love to the inhabitants of cities and towns, who often consider the Laplanders as very little superior to savages.

Their sheep and cattle have a stall assigned them near the entrance of the hut, to which they repair by the same door as the rest of the family, of which they constitute a part not of the least consideration.

GENERAL REMARKS

Near their huts the maritime Laplanders construct a receptacle for hay, to which purpose they fix three rows of posts in the ground, resembling the three walls of a house, with beams crossing them at a certain height from the ground. Upon these transverse beams they place their hay, which they press down as closely as possible, but principally work it round the upright posts, the tops of which remain visible. Thus there are left under the hay two empty spaces, divided, as has been mentioned, by the rows of posts, and termed, in the language of the country, *aike* or *lap*. In this manner the Laplanders preserve their hay through the winter, rain scarcely ever falling during that season to do it damage, and the snows affecting it but little on the outside. In the spaces beneath this haystack the Laplanders hang their coats, and store their reindeer skins, their pots, and other household stuff. When their stock of hay is consumed, they are under the necessity, in order to procure provender, to cut down trees, and strip them of their bark, which they offer to their cattle; they likewise give them small branches to eat. It sometimes happens that the frost proves so severe, as to congeal the snow, and prevent the reindeer from scraping it away with their feet, and thus hinder them from coming at the moss, which is their chief food: in this case the Laplanders cut down large firs and others trees, in order to take off the lichens and mosses growing on them. This occasions a great destruction and waste of timber. They feed their cattle likewise with roots, and sometimes prepare a particular mess on which their cows feed greedily. This is composed of the head, bones,

bones and entrails of fish boiled, together with straw, and the fucus, or sea-weed. The Norwegian peafants, or Normans as they are called, who inhabit the eastern parts of Finmark, fodder their cows not only with hay, but with the same mixture, or with such lichens as are given to the reindeer.

The winter tent of the mountain Laplander differs but little from the hut of the maritime Laplander just now described, except that the same contrivance which the latter uses for boiling his pot is not employed by the former. The mountain Laplander, in clearing away the snow to form a ground floor for his tent, raises with it a circular wall, which surrounds the habitation. The poles which support the woollen covering of his tent, are fixed in this wall of snow, and a small beam, crossing the top of the principal poles, supports the iron pot-hook to which his kettle is hung. The woollen cloth which covers the tent is in two pieces, joined together by wooden skewers. The door of the tent is cut in the shape of a pyramid, out of woollen stuff, extended by wooden stretchers. These stretchers frame the door, which is fastened to the tent only by a thong of leather at the top or point of the pyramid. The sides of the door are joined to some slender poles or sticks, which constitute the two door posts. One side of the door is fastened to either of these two posts, according as the wind blows, so as to prevent any opening to the interior of the tent, which might occasion an increase of smoke. By this means the tent can be entered only on one side, and on that alone which is opposite to the wind.

The mountain Laplander usually pitches his tent in the woods, and goes out every day, except Sundays and holidays, in search of fuel. Having cut down a tree, he drags it himself to the door of his tent, where he lops off the branches, and prepares the larger limbs for his fire, having erected a machine for that purpose, consisting of a transverse beam laid upon two upright posts. When he prepares to light his fire, he collects the ignited substances in a piece of birch bark, covering them with dry leaves and small twigs. The wood he afterwards puts on, being for the most part green and incrusted with snow and ice, as soon as lighted, sends forth a thick smoke, which is rendered still more intolerable by the unpleasant vapour emitted from the moist wood. The whole tent is for a time involved in a pitchy cloud, and all who remain in it run the risk of losing their eye-sight. As the flame breaks forth, the smoke gradually decreases, but the upper part of the tent is always filled with it, and if the wind be high, it is driven back from the aperture intended to let it out. When the mountain Laplander goes to rest, he does not extinguish his fire, which serves the purpose of a lamp, and affords him as much light as he has occasion for. At a little distance from his tent, the mountain Laplander raises a hovel, by laying a few beams across some posts stuck in the ground, and covering them with boughs. This serves him as a store-house for his rein-deers' skins, and spare utensils.

The summer tent of the mountain Laplander resembles, in every respect, that which he uses in winter, except that the covering of it is of canvas cloth, and that it has no snow wall, the snows being

being at that time every where melted. The small tent which the mountain Laplander uses when he hunts reindeer, or goes any long journey, is of coarse canvas, and called in his language, *luwo*. When he intends erecting it, he clears away the snow till he comes to the bare earth, over which he spreads small branches lopt from the trees near him, leaving a rampart of snow on every side. He then cuts down a sufficient number of poles, which he fixes in the snow, making them meet at the top, binds them together with a cord, and fastens them round his canvas covering, reserving an opening for the smoke. His fire is made on the stones he collects, and if he wants it for the purpose of cooking, as well as warming his frozen limbs, he fixes a pot which he has brought with him for that purpose. The maritime Laplander uses a tent of a similar kind, when he is upon a sea voyage, in his boat, and happens to be driven on shore by bad weather. He is then forced to have recourse to such an expedient, from the circumstance of no human habitations being near him.

The mountain and maritime Laplanders make use of small sheds as receptacles for provisions and household stuff not in immediate request: they are raised on logs of wood a small height from the ground. The maritime Laplander places them near his hut; the mountain Laplander in the woods, as is further explained in a following section, wherein the missionary treats of their journeys by land. The mountain Laplander digs holes in the earth, which he calls *gedge-borra*: these he paves at bottom with stones, and herein he stores the flesh of the reindeer.

Having fully described the huts and tents of the maritime and mountain Laplanders, Mr. Leems proceeds to speak of the habitations of the peasants in Norway and Lapland. These are mean cottages, the side walls formed of wood, the roof of turf, supported on boards which run longitudinally over the top. They are built without chimneys, in this respect differing from the huts of other peasants, but have a passage for the smoke through a number of apertures in the side walls, by which the light is likewise admitted. Their fire-places are constructed with heaps of stones in the form of ovens. The fire is daily lighted, and the door and holes before-mentioned left open, that the smoke may pass off. The fuel being fully consumed, the stones which form the oven are found thoroughly heated, and the door and apertures are closed, by which means a sufficient degree of warmth is preserved to last till the next day, when the oven is again lighted. These peasants use pieces of the fir-tree instead of lamps, and pave their huts with smooth stones.

SECTION VII.

Of the Manner in which the Laplanders prepare their Beds—Precaution used against the Musquetoes.

THE bed which the maritime Laplander retires to in his hut, and the mountain Laplander in his tent, is alike made of the skins of the rein-deer spread over the branches of trees, with which the floor is covered. The Laplander's outer coat serves as a pillow, and a prepared sheep's skin, with the woolly side inwards, as a blanket, over which is laid a woollen rug. For the winter the mountain Laplander has a rug, which has a bag within it, into which he places his feet. Be the cold ever so intense, the mountain Laplander goes into bed naked. The beds are by no other means separated than by a log of wood on each side, as has been already described. The husband and wife sleep at the farther end, the children in the division next them, and the servants nearest the door, but so nigh to each other, that the husband and wife can, with their hands, reach over to the childrens' bed, and these again to that of the servants.

In the summer season the mountain Laplander, being greatly infested with gnats, or musquetoes, has a contrivance to defend himself from their stings whilst in bed, and at the same time not

suffer from being too closely covered. In order to effect this, he fixes a thong of leather to the poles of his tent over his bed, which raises his canvas quilt to a proper height, but so that the sides or edges of it touch the ground: under this covering he creeps, and passes the night securely. The species of gnat that is so troublesome, is the *culex pipiens* of Linnæus: it is called, in the Danish language, *lys-myg*, and by the Laplanders, *zhinoik*. The female only bites and sucks the blood; but so difficult is it to guard against them, that gloves prove no protection, as they pass their stings through the seams. They are found in such swarms in the woods, during the summer, that whoever enters them is sure to have his face instantly covered, and is scarcely able to see his way before him. A slight swelling, attended with a disagreeable itching, immediately follows the puncture, and this is succeeded by small white ulcers; so that the face of a person coming from the country is scarcely to be recognised, and he appears full of blotches. Whilst the Laplanders are employed in the woods, on the necessary business of cutting timber for the sake of the bark, they are unable to take the refreshment of their meals; for their mouths, as soon as opened, would be filled with these insects. If the wind happen to blow briskly, they disappear for the time; but no sooner is the wind laid, than they return with their usual buzzing, and crowd every place. These flies equally infest the cattle and reindeer: when these animals return from the woods, they are found covered with them, and when they are swept from off their backs and sides, their skins are red with blood. Smoke is found

found to keep the insects at a distance ; therefore, while one Laplander is milking, another holds a firebrand over him, which prevents the gnats from approaching, and accordingly the beast remains untormented and quiet. The pleasure which is expected to be enjoyed during the summer, after a tedious winter that lasts from Michaelmas to July, as the good missionary observes, is entirely marred by these troublesome flies.

SECTION VIII.

Of the Diet of the Laplanders, and their Cookery.

THE reindeer's milk constitutes a principal part of the Laplander's food, and he has two methods of preparing it, according to the season. In summer he boils the milk with sorrel, till it arrives to a consistence: in this manner he preserves it for use during that short season. In winter the following is his method of preparation: the milk which he collects in autumn till the beginning of November, from the reindeer, is put into casks, or whatever vessels he has, in which it soon turns sour, and, as the cold weather comes on, freezes; and in this state it is kept. The milk collected after this time is mixed with cranberries, and put into the paunch of the reindeer, well cleansed from filth: thus the milk soon congeals, and it is cut out in slices, together with the paunch; to effect which a hatchet is used, for no smaller instrument would perform the office of dividing that lump of ice. It is then separated into small pieces, and eaten throughout the winter every day at noon, which is the Laplander's dinner hour. It must be presumed, as it is served up without being brought to the fire, that this is ice cream in the greatest perfection: here are flesh and fruit blended with the richest butyraceous milk that can be

be drawn from any animal ; but notwithstanding the extraordinary fatness, which may be supposed to resist in a great degree the effect of cold, this preparation, as our good missionary remarks with a degree of feeling, as if his teeth still chattered whilst he delivered the account, chills and freezes the mouth in a violent manner whenever it is taken.

The milk which is drawn late in the winter freezes immediately after being drawn. This is put into small vessels made of birch-wood, and is considered by the Laplander as such an extraordinary delicacy, that he reserves it as the most acceptable present he can offer even to a missionary. It is placed before the fire, and eaten with a spoon as it is thawed. When put by it is carefully covered up, because if the cold air get to it afterwards, it turns of a yellow colour, and becomes rancid.

Cheese is made from the milk of the rein-deer in the following manner. The milk has water mixed with it, otherwise, owing to its extraordinary richness, it would not curdle when the rennet is put in. When a sufficient quantity of water is added to the milk, it is set over the fire to be heated, and after this has been sufficiently done, the rennet is thrown into it; the whey is soon separated from the curd, and the latter is taken out and wrapped up in a cloth to be pressed; after which it is moulded in a round shape: it is eaten cold, boiled or toasted. When held before the fire, it is found so fat that it is in danger of burning, and if permitted to do so will flame like a candle. It is esteemed excellent to heal chilblains. The rennet used is obtained by infusing the found

found of the cod-fish, or the intestines of the reindeer with a quantity of butter milk.

The mountain Laplanders likewise make butter of the reindeer's milk; but as they take in the whole substance of the milk, it is of a white colour, and not so well tasted or fat as that of the cream of cow's milk, used for that purpose by the maritime Laplander, who has few reindeer, and whose stock consists chiefly of cows, sheep, and goats. In making their butter the women use their fingers only, stirring the cream about with them till, as commonly expressed, the butter comes, or till it acquires consistency.

The mountain Laplander constantly dines or sups upon venison fresh killed throughout the winter, and slaughters weekly one or two reindeer, according to the number of persons of which his family consists. His venison is cooked in the following manner. He cuts small pieces, which he puts in his pot, without paying any regard to cleaning them from blood and dirt: he then places the pot by the side of the fire, that the fat may be drawn from the meat by gentle heat. When the meat is nearly done, he skims the fat off and puts it by in a shell, throwing a little salt into it; he next takes out the pieces with a wooden fork, and lays them on a dish, leaving the remaining liquor or broth in the pot. Supper being now ready, the family seat themselves round this dish of meat; and as they eat, each dips the pieces held with the point of the knife into the shell which contains the fat that has been skimmed off, and now and then sups a ladle full of the broth remaining in the pot, which is taken without any mixture of flour

or other seasoning : in this manner they finish their repast. They have been accused of eating their venison raw, but that the missionary assures us is never the case. Besides the fleshy parts of the rein-deer, the mountain Laplander boils the legs for the sake of the marrow, which being considered as highly delicious, is reserved for the missionary. They likewise cook and eat the entrails, but never with the meat. The mountain Laplander does not even give the bones to his dog, but stewes them as long as he can get any oil from them, for which purpose he breaks the bones in small pieces.—Count Rumford himself could not exercise greater economy. The lights of the rein-deer he divides among his dogs. These animals are of very great service to him in following the rein-deer, and some of the Laplanders have to the number of eight. They are fed very sparingly ; for, except the lights, when a rein-deer is killed, they have only a little broth given them in the morning and at night. The Laplanders not only stew their venison, but often eat it roasted, of which they are particularly fond. In roasting they make use of wooden spits, sticking one end in the ground, by which means the flesh hangs before the fire, and remains there until sufficiently cooked. Basting meat with butter is utterly unknown to them.

From what has been said, it will be concluded that the Laplanders eat their venison fresh, and are not accustomed to keep it by means of salt : indeed, as they never kill deer during the summer, they have no occasion to avail themselves of this expedient to preserve the venison sweet during the rest of the year. To

vary his diet, the Laplander sometimes smokes his venison. To do this, they have only to make pretty deep incisions in the pieces that smoke may enter the meat, and to hang the joints on the top of the tent, where it is soon cured.

Venison is the chief food of the inhabitants of the mountains; but those on the sea coast have beef and mutton, and both eat the flesh of bears, wolves, foxes, otters, seals, and in short of all animals but swine; pork being to a Laplander an abomination.

The Laplanders who are employed in catching salmon, live upon that fish split and dried. Dried fish is eaten by them without any preparatory cooking; but before they put it into their mouth, they dip each piece in train oil. Fish with this kind of sauce is given to children at the breast; and to prepare it for their tender mouths, the mother first puts it into her own, and masticates it before she presents it to the infant: thus they are accustomed to the luxury of train oil from their birth, for such every Laplander esteems it, and considers its flavour as far superior to that of butter. But it is not true, as has been asserted, that they take off a pint of train oil at a meal, or that women in labour swallow a quantity of it in order to ease their pains.

When their stock of dried fish is reduced, they collect the heads and bones of fish which have any thing on them, and these, when roasted before the fire, are put into a kettle with slices of the blubber of seal, the bones having been previously inserted in the belly of the seal, where they remain some little time, that they may be impregnated with the oil. These ingredients are suffered

suffered to stew some time in the kettle, and when supposed to be sufficiently cooked, are served up. To season the mefs, a quantity of oil is reserved which has been drained from the seal, in which the morsels are dipped as they are eaten.

They roast their fish as well as flesh, and are fond of the cod-fish roasted fresh caught. The liver of this and other fish, bruised and mixed with cranberries, is considered as a savoury dish; and this, as well as their food in general, which the reader will have perceived, is of the most unctuous kind, is eaten without bread. A diet of this description, were it proposed, would be rejected by physicians as not conducive to the preservation of health; yet the example of this people making a constant use of such food, must prove it perfectly compatible with it: for the Laplanders enjoy that blessing in its utmost perfection; chronical disorders, dysenteries, fevers, being unknown amongst them. The only epidemical disease that has been remaked is a colick, attended with spasms, which the physicians suppose to proceed from worms; but this complaint is rather troublesome than fatal, and does not invalidate the evidence of their general state of uninterrupted good health.

The little use they make of bread has been already remarked: it is, however, to be observed, that they form a cake, which they bake on the hearth, composed of flour mixed with water only.

The Laplanders are not without those dainties which are meant rather to tickle and please the palate, than satisfy the cravings of hunger. These little preparations of luxury, which are known at

the tables of the rich and great in other parts of Europe by the name of the desert, the reader will learn with some surprise, are not entirely unknown to those simple people. To gratify their taste they peel off the inner bark of the fir-tree and sometimes eat it fresh, and at other times heighten its flavour by hanging it up in the smoke. To render it completely relishing, it is constantly steeped in their favourite train oil sauce. Of apples, nuts, and the fruits known in other countries, they have neither the knowledge or desire to taste; but to make amends, they possess the herb angelica, of which they eat the root and leaves, either raw or boiled in milk: these, with the berries that are found when the snows are melted, thoroughly ripened by having remained buried during the long winter, serve to amuse the time they usually pass at-table.

But the Laplander's chief luxury is that herb in such universal use over a great part of the globe, viz. tobacco: this is an enjoyment of which he is fond to a degree of extacy. To obtain the flavour of it, when not otherwise to be procured, he will even chew slips of the bag which has held it, or chips from the cask in which it has been packed. He takes it either in substance by chewing, or receives its grateful smoke through a tube. When he chews tobacco, he will frequently spit into his hand and regale his nose with the saliva which has imbibed the pungent salts of the herb; thus at once gratifying the senses of smell and taste. When they are assembled together at a convivial party, and the supply of their favourite herb is deficient, they place themselves in a circle

a circle and pass the pipe from mouth to mouth, so that every one receives four or five whiffs in turn, and all are equally gratified with the pleasure of smoking.

The constant drink of the maritime and mountain Laplanders is cold water, procured in winter by dissolving snow, and this is their beverage as long as any snow is to be had; for this purpose a quantity is always standing in a copper vessel in their huts or tents, as has been already mentioned. The mountain Laplander generally pitches his tent in places where water may be had, and by cutting through the ice contrives to supply himself.

The reader is now fully acquainted with Lapland cookery, in which, as has been observed, the women never interfere. The husband performs the office of cook in all its branches, and, as the dishes are never washed, the office of scullion is not requisite in the economy of a Lapland household.

SECTION IX.

Household Furniture of the Laplanders.

THE inventory of the articles which constitute the Laplanders household furniture is very short: he has sufficient to answer his wants, and more than this would prove an incumbrance. The tent of the mountain Laplander is pitched one day in one place, and the next day removed to another: it is much the same with the maritime Laplander. Chairs, tables, and things of this kind, which other people require, are to them totally unnecessary, and therefore they have them not. If they possessed them, they would have no where to place them, and when they removed they must leave them behind; for they could not, without the greatest inconvenience, carry them away. A few copper vessels, tin kettles, wooden bowls, and horn spoons, form the whole of their kitchen utensils. To this scanty and unexpensive catalogue, a few of the richest individuals add two or three pewter dishes, and some silver spoons. The mountain Laplander has no light in his hut during the night but what the fire affords him: the maritime Laplander uses a lamp. A sea shell holds the oil, which supplies the wick made of a kind of rush, and thus is the constant light of a lamp readily procured from materials

near at hand. The most ornamental piece of furniture the Laplander possesses is his child's cradle : this is a piece of wood properly shaped, and hollowed with his own hand. It has a recess for the infant's head. Cords are fixed to go round it, and fasten occasionally to the mother's back when she travels ; and a ring with beads is suspended from the upper part, to amuse the child as it lies on its back with its hands at liberty.

SECTION X.

Of the Rein-deer, the Tame as well as the Wild: Treatment of tame Rein-deer, and the various Advantages which the Laplander derives from them—In this Section mention is made, incidentally, of the Time about the Winter Solstice, when the Sun never rises above the Horizon; and about the Summer Solstice, when it never sets.

THE rutting season of the reindeer begins about the close of autumn, and the female brings forth her fawns in the spring of the year. The oldest and strongest buck, called by the Laplanders *aino-valdo*, usually drives away all the others, and remains the general husband of the herd.

It has been a notion that the hinds, or female deers, can only bring forth in stormy weather, which commonly prevails about the feed-time, and which from thence has obtained the name given it by the Norwegians, of *rein-kalve-rein*, or fawning season: but this, Mr. Leems informes us, is no more than a vulgar prejudice; for these animals, he observes, produce their young indifferently, like all other four-footed beasts. Some of the hinds bear annually; these are called *aldo*: others named *kodno* every other year; and some that are denominated *ftainak*, are barren. As soon as the female has fawned she loses her horns. The fawns

from

from their very birth are nimble, and are soon able to run with equal speed and keep up with her dams. Every hind knows her own fawn, let the herd be ever so numerous.

If the hind be of an ash colour, her fawn at its birth is red, with a stripe down the back, and is then called *mieeffe*. This colour grows darker, the red hairs falling off towards autumn, when it is called *zhiaermak*. Some rein-deer, when full grown, are white with ash-coloured spots : the fawns of a white mother are always white.

The hinds called by the Norwegians *fimler*, exceed the bucks in size ; many of them have fine branching horns, and some few none at all : the horns grow again as soon as shed ; the new ones appear at first like two soft swellings on the head, of a blackish colour ; the skin as they shoot forth changes to an ash colour, and peels off when the horns are near dropping. The horns are thick at the bottom, but thinner as they spread out, with points like fingers ; and they are so branching, that when these animals fight they are often fastened by their antlers, and not able to extricate themselves without the assistance of man. Their haunches are the fattest parts ; and these are very much so before the rutting season.

The rein-deer is much infested in the summer by a fly which creeps up its nostrils, and is on that account called by Linnaeus *aestrus nasalis* : the Laplander's name for it is the *trompe*. The rein-deer is likewise subject to a distemper, which is contagious, and so fatal, that it often proves destructive to numerous herds :

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this disorder, for which no remedy has yet been discovered, is an affection of the spleen, called the *miltfyge*; and as it is looked upon as totally incurable, the Laplanders kill the deer as soon as they find symptoms of infection, in order to save at least the skin. Mention has already been made of an insect which renders the skin of less value by perforating it: this insect is often destroyed by applying tar to the animal's back; and from the fly before-mentioned, which attacks the nostril, the reindeer is often relieved by the sneezing occasioned through irritation. Rein-deer are likewise subject to a disorder common to animals having hoofs; this is the paronychia, by the inhabitants of Norway called the *klovfyge*. The females have likewise small eruptions on the udder, similar to that which at present is known in England by the name of cow-pock.

The principal food of the reindeer in winter, is a sort of white moss, called by the natives of Norway *quit-mosse*; its botanical name is *lichen rangiferinus*. To come at this moss the animal is obliged to dig with its foot under the snow. It sometimes happens, although but rarely, that the snow is so frozen that the reindeer is not able to get at the ground: were this to be the case for any length of time, there would be great danger of the whole race of these animals being starved and lost, to the entire ruin of the Laplanders: but so great, says the missionary, has been the kindness of Providence hitherto, that no such event has ever happened, and perhaps never may.

The reindeer which are tamed, and constitute the chief wealth
of

of the Laplanders, are never housed during the whole year: in summer they find plenty of grafs, and in winter they live chiefly on the white moss before mentioned. In some parts of Norway these animals are used instead of horses, and are there kept in stalls during the winter. The rein-deer is particularly fond of man's urine, and will greedily lick up the snow whercon it has fallen. It is likewise said that they hunt after a particular kind of mice, of which they eat the heads only: their drink in winter is collected from the snow, which they gather as they pass along when drawing the sledges.

The greatest enemy of the rein-deer is the wolf, and it requires the utmost diligence and circumspection of the people to guard and defend their herds against the insidious attacks of this inveterate and cunning foe. They endeavour to affright and keep him off by means of stakes driven into the earth, having pieces of worn-out and tattered tunicks and other garments hanging on them: but it is chiefly during any violent storm that they have occasion to be most vigilant; for at that time this depredator is on the lookout for an opportunity to invade the timorous herd: in the moment of alarm, every one of the Laplanders household is then put in motion, some to look to the rein-deer, whilst others make a loud noise by beating with sticks against a sledge, brought without the tent for that purpose: and, indeed, there is a necessity for the greatest precaution on the part of the Laplanders, because the tame rein-deer is so simple an animal, that if not carefully protected, it becomes an easy prey to the wolf. No sooner is that voracious

beast discovered by the herd, than the silly creatures, instead of running towards the tents, and putting themselves under the safe-guard of men, fly towards the woods, where some are overtaken and killed by the wolf, who is observed to use his utmost endeavours to keep betwixt them and the tents when he finds them feeding at a distance. In this pursuit the wolf has the advantage of the rein-deer when they are running down hill, and he is sure to overtake and seize it: but it is not the same up hill. If the wolf catch the rein-deer by the haunch, it often happens that the deer escapes; and when he obtains his prey, it is generally by fastening on its throat, by which means he strangles the poor animal in a short time. The missionary says, he saw six at one time lying on the snow, killed by wolves who had been driven away on the alarm being given: upon examination of the carcases, no wound appeared to have been inflicted, so dexterously had these destructive enemies effected their purpose. It is observable, that the wolf never devours his prey on the spot where he kills it, but drags it away to some distance; and it is further remarked, the missionary tells us, that in devouring it, he places the head towards the east; at least, he says, the skeletons are always found in the woods placed in that position. I cannot say that I give entire credit to this report: probably the good missionary has been misinformed. Whilst the wolves are on the hunt for their prey, they appear always to be accompanied by a number of crows and ravens, and the Laplanders are commonly apprized of the wolf's approach by the clamour of these birds. It has been noticed, that such rein-deer as were fastened

tended by ropes to a stake have been spared, whilst others that were at liberty have been carried off : this must be owing to a fear conceived by the wolf at the sight of the animal's tether, or to some similar cause ; for the like has not happened, when the deer has broken loose and betaken himself to flight.

The more readily to know his own deer, each Laplander puts a particular mark upon those belonging to him, which generally consists of an incision in the animal's ear. In order to keep their herd together and prevent their straying, the reindeer are twice driven out to feed, under proper attendance, and as many times brought up to the tents every day ; and this method is constantly followed during the depth of winter, when the days are shortest, and the nights sixteen hours long.

They who are but little acquainted with the solar system will be at no loss to account for the reason, why the sun in that climate remains for seven weeks together beneath the horizon, and lost in the lower hemisphere, leaving instead of a clear day-light, a twilight only of a few hours. It is not, however, so dark, but that when the sky is free from clouds a man may see to write, or do any common business in the shortest days, from ten in the forenoon to one o'clock in the afternoon, without the help of a candle : and as during the winter solstice the sun withdraws his light for such a length of time, it may be readily conceived, that the lesser luminaries, in those days that are shortest, must shine very bright, and that the moon gives her light by day as well as night. After the space of seven weeks is elapsed, the sun again makes his appearance,

appearance, renewed in splendour, and to common apprehension more brilliant. This happens about the first of April, by which time the days are so far lengthened, that the shades of an universal night begin to disappear: and as the sun ceases to illuminate the land for seven weeks in the winter, so in the summer solstice he makes the Laplander amends by appearing above the horizon, and shining night and day during the same space of time; wherein it is to be observed, that the night's sun appears paler and less bright than that of the day.

But to return to our rein-deer—When brought back to the tents from feeding, these animals repose themselves, and form a circle round the tents: while they are in search of the moss which is their food, they spread widely over the country; let the weather be fair or foul, they are driven out to feed at the regular and accustomed time; and as the herdsmen, in order to shelter themselves from a snow-storm, sometimes retire behind a hill of snow, where they may be overtaken by sleep, it often happens that a wolf carries off one of the herd which has straggled to a distance from the rest. The office of tending the herds is in general performed by the children and servants; but when the rein-deer are the property of a family just established, without children or servants, in that case the wife takes the charge upon herself; and if she chance to have a young child, which she suckles, she takes the child, in the cradle before described, with her, and follows the herd, however inclement the weather may be. In driving the rein-deer, the dogs which the Laplanders keep, and train for this purpose,

pose, are found of the greatest use ; and so well are they broken-in, that they obey the slightest signal : this seems to be communicated with as much celerity by the dogs to the rein-deer, which, though ever so widely dispersed, soon collect themselves in a body. In the winter, when the herd is returned to the tent, and laid down to rest, the Laplander, or his wife, goes out and counts the number, in order to ascertain if any be missing, and become the prey of the wolf. The Laplanders seldom fail in discovering when the herd has sustained a loss of the kind, although it would appear no easy task when the number is very considerable, which is now and then the case ; for some Laplanders are said to possess from one to two thousand head of rein-deer.

It has been stated, that it is a rule with the mountain Laplander to drive his herd of rein-deer, by turns, twice to pasture, and twice home to his tent in the course of a day. In the summer, however, the gelt rein-deer, and the hinds, or females, are suffered to range the woods without a herdsman. In this season, likewise, the hinds are for a certain time allowed to suckle their fawns ; after which they are driven into an inclosure made with branches of trees, at some small distance from the tents, where the women, whose peculiar office it is, besmear the dugs of the hinds with dung, in order that when they are set at liberty again, the fawns may not suck : after a proper time, the hinds are driven into the same inclosure, when their dugs are found distended, and are drained of their milk, being first cleansed from the soil. But these animals do not readily suffer themselves to be milked, nor until a

rope is thrown over their horns to fasten them. Although a reindeer does not give more milk in common than a she-goat, yet, from the numerous herds kept by the Laplanders, they find no want of milk, cheese, and butter.

They fix yokes about the necks of such of their rein-deer as are particularly addicted to straggling from the herd. The ropes they have are made from seal-skin, as are the reins used for the sledges.

The Laplander, in performing the operation of gelding upon the rein-deer, makes no incision with a knife, but employs his teeth for that purpose, bruising the animal's testicles by biting them, but without inflicting any outward wound. The castrated deer have different names according to their ages; one of two years old is called *vareek*, of three years *voveers*, of four *goddolas*, of five *knoiftus-harerge*, of six *makan*: after they are seven years old they have no fresh name, but are styled *namona-lapek*, that is to say, aged, or past the full age or name. The rein-deer, after that operation is successfully performed, increases in size and flesh beyond the other males, and becomes of great value to his owner; insomuch, that any thing valuable is said to be worth a *gelt reindeer*; and it is esteemed the greatest compliment that one Laplander can pay to another, to tell him he has as great a regard for him as for a *rein-deer gelding*.

When the Laplander is about to kill a reindeer, he first fastens him to a post with a rope, and then stabs him in the neck with a knife, which he withdraws from the wound; the animal then stirs a few steps and falls: after it has lain about a quarter of an hour,

hour, the skin is stripped from the carcase : the wound is made so dexterously, that no blood issues from it, but is found in the inside, whence it is carefully taken out and inclosed within the paunch that has been cleansed and preserved for use. The hide is afterwards stretched out with sticks proper for the purpose, and carefully dried : the skin of the legs is first taken off, and afterwards stuffed, that it may dry more expeditiously.

If a mountain Laplander happen to be reduced to a small stock of rein-deer, he quits the mountains with his family for the seaside, and betakes himself to fishing, leaving the few deer he possesses in the charge of some other person.

From what has been said in the former part of this section, the reader will easily recollect that the Laplander's stock of rein-deer is tame, and bred under his own eye. It sometimes happens during the rutting season, in autumn, that a buck of the wild breed mixes with the tame herd : if he chance to escape the bullets of the Laplander, who uses his utmost endeavour to shoot him, and impregnate a female reindeer, the fawn, which is the produce of this irregular conjunction, resembles neither sire nor dam ; it is a mongrel creature, less than the wild reindeer, and larger than the tame ; for in general the wild breed are the largest of the two. This mule reindeer is called by the Laplanders a *baevrek*.

SECTION XI.

*Of the Mode of harnessing the Rein-Deer, and the different Sledges
that are used by the Laplanders—The Manner of Travelling with
Rein-Deer and Sledges.*

SUCH of the Laplanders as are rich make use of gelt rein-deer for their sledges; they who are less wealthy content themselves with a sledge drawn by a hind, or female. It requires great pains to break these animals to the harness; and some are never to be taught at all, whilst others are brought to it by perseverance, and after a length of time.

The gear, or harness of the reindeer, is called by the Laplanders *baggie*. They use only a rein or thong for guiding the deer, which, like a halter for horses, is fastened to the head of the beast, whilst the other end is held in the hand, being fixed by a loop to the right thumb. Over the neck of the animal is put a broad collar, made of untanned reindeer skin, to which a rope is fastened of thongs cut from seal-skin, or the hide of an ox, and twisted together: this rope passes under the belly, betwixt the fore and hind legs, and is made fast to the sledge; the rope is covered with a soft skin, that it may not gall the animal's legs.

Another

Another collar is sometimes put on by way of ornament, although the rope before-mentioned may also be fastened to it: this collar is made of kersey cloth, and embellished with tinsel, having a ball hanging from it at the bottom.

A broad girth surrounds the body of the rein-deer, and is called by the Laplanders *augotas*. That part of the girth which is under the belly is of leather, the other, covering the back and sides, of kersey, ornamented with tinsel, and lined with skin: but this girth is not in general use, though it certainly appears to be of some service, inasmuch as it has an opening for the rope before-mentioned to pass through, and by that means causes the sledge to proceed with steadiness; whereas the cord being fastened to the neck collar only, admits of shaking, and unsteady motion out of the straight line, as the animal bounds from side to side in the velocity and violence of his progress. This entire harness, besides other trappings which are only used occasionally, and not necessary to be here specified, is the work of the Lapland women.

The sledge is made exactly in the shape of a boat, having a flat stern. It has a keel and thwarts (to speak the language of boat-building), and the side planks have their ends fastened with wooden pegs. The sledge is caulked within, so that no water can enter through the sides. The rope by which the sledge is drawn is fixed to the head-post. The Laplanders have four different kinds of sledges. One called *giet-kierres*, that is to say, the portable sledge, is most commonly used: this is entirely open from head to stern, and so light that it may be taken up and

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carried in the arms: it is so short, that a Laplander, sitting in the stern, touches the head with his feet, its width just admitting of room for his legs and thighs closed together, and so low that with his hands he can scoop the snow on either side of him. The second kind of sledge, or the *raido-kierres*, answers the purpose of a cart, and is calculated to transport goods. It exceeds the giet-kierres in length, breadth and depth, and is without a deck, like the other; but in order to keep out the snow, when loaded, it is covered over with skins, which are fastened to the sides by means of the twisted sinews of the rein-deer, for which purpose loops of leather are placed there. The third sort of sledge, called *pulke*, is likewise employed as a travelling carriage: it is payed on the outside with pitch, and differs from the first kind only in having a seal-skin fixed to the head, which covers the legs and knees of the passenger. To this seal-skin is joined a rug, which spreads over his lap, and defends him from the snow: this likewise is fastened by leather loops fixed to the sides, so that only the upper part of the body of the traveller is uncovered, who is besides seated on skins placed in the bottom, as in the sledge called giet-kierres. The fourth species of sledge, denominated *lok-kierres*, is likewise payed on the outside with pitch, and serves for transporting provisions: it is larger than the pulke and giet-kierres, and has a convex deck over it from head to stern: from the stern there is a projecting bolt, by which they raise the hatch when any thing is to be drawn out or stowed under the deck. The Laplanders keep their tents under a wooden covering, called *bildagak*, where the sledges

sledges likewise may be lodged which are not in use; in general, however, they turn them upon the snow, keel upwards, and in this position they answer the purpose of repositories for their venison.

Before the Laplander enters the sledge, he puts on his gloves, which have the fur on the outside; afterwards he places himself in it, taking the rein, or halter, fastened to the reindeer's head, and tying it about his right thumb. In the mean time the deer stands still, and the rein hangs on the left side. When the man is ready to set off, he shakes the rein with violence from side to side, and the animal springs forward at great speed. The driver directs the course of the deer, which is irregular and serpentine, by pulling the rein on the side he would have him go. When the Laplander would travel at the fullest speed which the reindeer is able to make, he places himself on his knees, encouraging him by certain sounds or other movements to mend his pace; and when he would have him stop, he shifts the rein from the right side to the left, upon which the animal immediately stands still.

If it happen that a rein-deer prove restiff, or inclined to run away, the Laplander, if in company with others, gives up his rein to the driver of the sledge immediately before him, who ties it to his sledge, and thus the unruly animal is checked in his violent speed by the more sober rein-deer harnessed to the sledge which precedes. As, in descending steep hills, the sledge is apt to glide forward, and press upon the hinder legs of the animal, a second

rein-deer is put to the stern of the sledge, with a rein or halter fastened to his horns: this serves the same purpose as the breeching belonging to the harness of carriages. It sometimes happens that the rein-deer which is placed behind the sledge, by moving forwards, does not answer the intention of checking its velocity in the descent; in which case, after a trial, the animal is rejected, and one found that is better trained and more docile. In going down such hills as are less steep, the driver can, by a dexterous movement of his body only, regulate the sliding of his sledge, so as to have no occasion to tack a deer to its stern. Where the descent is of the steepest kind, a further security is required, namely, the rein-deer is taken from the head and made fast to the stern of the sledge, when the sledge, gliding down, brings the animal after it, which serves as a check to the precipitancy of the motion.

The following is the method taken in transporting baggage in the sledges before-mentioned, to which the Laplander gives the name *raido-kierres*: the conductor of the train of sledges seats himself in the first sledge, to the stern of which the rein of the second sledge is fastened, and in like manner the rest follow to the number of three, four, or five sledges, connected with one another, each sledge being drawn by its respective rein-deer, and guided in the proper track by the one immediately preceding: the train is closed by a rein-deer not harnessed to any sledge, which is done with the intention that in descending any declivity this rein-deer may be able to check and resist the impetuosity of the sledges in their

their progress. It seldom happens that the snow is of such depth that the rein-deer are unable to make their way through it: sometimes, however, it is the case that the animal sinks in up to his belly, when, as may be supposed, the traveller can proceed but very tardily.

SECTION XII.

Of the Wandering Laplanders, and their Migrations.

THE maritime Laplanders only change their habitations twice a year, that is to say, in spring and autumn: in doing this they leave their huts standing until their return; but this rule is not observed by the mountain Laplander, who, like the ancient Scythians, or the modern Tartars and Arabs, is continually wandering from place to place. In the middle of summer the mountain Laplanders, with their families and herds, move towards the sea-coast, and on the approach of autumn, return to the mountains. Their progress is but slow, for they do not proceed above four English miles each day, and the whole extent of their migration from the sea-coast to the borders of Swedish Lapland, does not exceed thirty. When arrived there, they may be said to be stationary; because afterwards they only remove to short distances, as occasion requires, from one hill or wood to another. As soon as winter is passed away, they seek the sea-coast in the same leisurely manner, until they reach the spot which they have destined for their summer residence.

On the road by which they pass to the sea-coast, the mountain Laplanders construct a sort of hovel for the purpose of depositing provisions,

provisions, and such necessaries as they may have occasion for in their journey. In their return to the mountains in autumn, the rein-deer being in that season particularly fat, they kill as much venison as they judge necessary, and lay it up in these store-houses, where it remains during the winter, being intended as a supply for themselves and household in the following spring, when they shall be on their progress to the coast.

In spring and autumn, the earth being freed from its incumbrance of snow, the mountain Laplander and his family travel on foot, his tent and the rest of his baggage being conveyed by the rein-deer; and if his wife have a child at the breast, the infant is carried by her in the cradle already described.

When he removes in winter, he takes with him every thing belonging to his tent, even to the stones which form his hearth; and this he does in order that he may meet with neither disappointment nor delay when arrived at the spot whereon he intends to pitch his tent. For the brushwood with which he carpets the inside of his tent, as well as firewood, he trusts to what he may be able to procure within a little distance. To convey his tent in the winter season, he has a particular sledge, to which he harnesses one of his inferior deer; so that it may be well supposed his tent and all that belongs to it, is of no great weight.

The following is the order of the winter march: the husband proceeds in the leading sledge, and is followed by the wife in the second, which she drives herself; and if she give suck, she has her child in the cradle by her side, carefully wrapped up in furs, with

a small space left open before its mouth to breathe through and receive the nipple, which, whenever she has occasion to put into the child's mouth, she is under the necessity of stopping the fledge, as she is obliged to kneel towards the side of it, whilst she applies the infant to her breast. The rest of the family follow the fedges on foot, having in charge to drive the rein-deer the way they go.

It must appear wonderful that the Laplanders are able to travel in the winter by night as well as day; when the earth presents one entire surface or sheet of snow, and not a single vestige is discoverable of human industry and labour to direct their way, the snow flying about in all directions at the same time, and almost blinding them: yet it is certain, that they are at no difficulty to find the spot to which they are bound, and very rarely meet with any accident. They fix bells to the harness of the rein-deer, as before-mentioned, in order that they may be kept together by hearing, when they cannot see one another, after the light of their short day fails them. To guide them in their route, they make observation of the quarter from whence the wind blows, and by night are directed by the stars; and, as the missionary observes, Providence and these never fail them, so that he does not remember more than one fatal accident happening during the ten years that, as has been already mentioned, he lived amongst them.

The Laplander has always his flint, steel, and matches ready by him, which he constantly carries in a pouch in his bosom, occasionally to light his pipe of tobacco, or a fire, as necessity requires; for

for it often happens, that when he is upon a journey, he is obliged to stop by the way, either from its length, or from being prevented going on by the weather. In such a case he has his travelling tent, which he erects as speedily as possible, and, lighting a fire, reposes himself until he thinks proper to pursue the remainder of his journey. Whilst he is thus lodged in his tent, the reindeer is made fast to some tree.

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SECTION XIII.

Of the Quadrupeds and Birds in Lapland.

FINMARK, or Norwegian Lapland, abounds in wild rein-deer; but as the inhabitants breed large numbers of the tame sort, their whole time is taken up in attending these, and they have but little leisure to hunt the wild, which are called *godde*. When the Laplander is inclined for the chase in summer or autumn, he takes with him a dog of good scent, which seldom fails of finding out a deer in a very short time. As soon as the sportsman has roused his game, he muzzles the dog that he may not bark and fright it away. If, on firing, he discovers that he has only wounded the deer slightly, he unmuzzles the dog and sends him in pursuit; and as the rein-deer generally keeps the dog at bay, the man has an opportunity of firing a second time, when he rarely misses killing. In autumn, during the rutting season, the Laplander drives some of his hinds to those parts where he expects to find the wild rein-deer, and upon a buck presenting himself, he fires till he brings him down. It often happens that two bucks contest for the females, when the Laplander, using the advantage of their being engaged, kills one, and sometimes both of them.

In

In winter the Laplander is able to hunt the rein-deer by tracking them in the snow. When he is come in sight of his game, he quits his sledge, and tying his draught rein-deer to a tree, he pursues the wild deer on foot. In many parts of Lapland the wild rein-deer is taken by the following devices. When the snow has fallen in large quantities, so as to be passable only for the natives in their snow shoes, they go in chase after the wild rein-deer, which are unable to run fast, being impeded by the deep snow; and coming up with them they knock them on the head. Another method is, by suspending ropes with a running noose in a narrow pass, near the places where the wild rein-deer usually harbour, through which the deer being driven, it is hampered by the horns and taken. In some districts of Lapland the wild rein-deer has been caught by the following device. A space is fenced off in those parts which the deer chiefly frequent, and on a spot proper for the purpose: this space has a wide entrance, and encroaches in width in a circular form, ending with a narrow door or passage. The deer driven within this inclosure, in order to avoid his pursuers, betakes himself to this narrow pass, which leads him to a declivity; this is closed upon him at the bottom, and he yields himself a prey, being unable to return, and having his pursuers at his heels. This method was oftener put in practice formerly than of late years, as was that of forcing the deer to take to a lake or standing water, when they were knocked on the head, or shot on landing. It has been said that the Lapland women hunt with their husbands; but the missionary affirms that this assertion is groundless.

groundless. It should seem, that the Laplander's wife confines herself to the duties of her situation, and is not ambitious, like some of her sex in other countries to the south of Lapland, to distinguish herself by exercises which are better adapted, and more properly belong to the men.

Hares exist in great plenty in Lapland ; they are white in winter, but in summer of the colour they are usually found in other places. The Laplanders sometimes shoot them, but for the most part take them in snares and traps.

Bears are common in Finmark, and different parts of Norway. The rein-deer, by their swiftness, are able to elude those enemies ; but cows, sheep, and goats frequently become their prey. Besides flesh, the bears are exceedingly fond of berries, insomuch, that these owe their vernacular name to them ; the same appellation in the northern languages signifying both. Of berries the bear finds a sufficient supply during the summer in the woods ; he eats herbs and grass likewise in that season ; flesh therefore seems to be eaten by him through necessity, and the want of other food in winter. The Laplanders generally assail the bears with their rifle guns ; but if they be not killed or disabled by the first shot, the hunter stands in great jeopardy, for the wounded animal will then return to the attack with the greatest fury. The bear is likewise en-snared by stratagems of various kinds. It is a prevailing opinion in the countries of northern Europe, that this animal supports himself through the winter by a milky kind of moisture that exudes from his fore paws, and which he sucks, uttering at the same

same time a strange kind of growling or murmur. However that may be, it is pretty certain that the bear seeks his prey, in the winter season, only in the night time. Now it often happens that the Laplander, in search of very different game, by means of his dogs, discovers the retreat which the bear has chosen for his winter quarters. Whenever this is the case, the Laplander prepares to surprise him in his retirement; and in order to this, cuts down from the nearest trees a number of branches, which he plants and interweaves very strongly about the entrance of his den, leaving a space just sufficient for him to thrust his head through: this done, and being provided with a hatchet, the Laplander sets about rousing the sleeping animal, who, provoked with the hunter's temerity and insults, advances with the utmost rage towards the opening; but no sooner does he put his head through the wicket, which has been made for the purpose, than the hunter levels a stroke with the hatchet, which, if it hit him below the eyes, to a certainty brings the beast to the ground. In hunting both the rein-deer and bears, the Laplanders make great use of their dogs. The grease of the bear is in much request with the inhabitants as a sovereign cure, in form of an unguent, for pains in the limbs; but it is a prevailing opinion with them, that it must be applied according to the sex, the male bear's grease as a remedy for the man's ailments, and the female's for those of the woman's, and that, when indiscriminately used, it can be of no service.

Few or no lynxes are seen in Finmark, but wolves are very numerous; and for these there are various names in different parts
of

of Lapland. Their fur is in general of a yellow or tawny colour, but some are whitish. The Laplanders often shoot the wolves, but more frequently catch them in traps: the skins are dried for sale.

The fox is an animal of which Finmark produces a variety, and in the greatest numbers. Some of them are red, others red with a black cross; others quite black, and some black with long hairs on the back, which are of a silver colour at their extremities. The skins of these last, well known by the name of the *silver-haired fox*, are greatly valued all over Europe; and, by an order issued in 1652, were reserved for his Danish Majesty's use only. At present they are sold to any purchaser, and chiefly to the Russian merchants, who import them into their own country, where they are employed to ornament the dresses of the first personages of the Russian empire. Besides these already specified, there are found white foxes with black ears and feet, having white tails with black hairs intermixed. The fox is traced in the snow, and followed by the Laplander till within gun shot. Sometimes he is decoyed to a spot where flesh has been buried under the snow with a view of alluring him; and while he is eagerly digging for the bait which he has scented, the hunter from his concealment fires upon him. This kind of chase is usually practised in the night when the moon shines, or by the light of the aurora borealis, which is peculiarly bright in this climate. The fox is likewise dug out of his earth; and a variety of stratagems and devices are called in aid to bring him into the power of his per-

secutors; he sometimes falls even a victim to poison. It has happened that the fox, when caught by the leg, has left a part of it in the trap, and hobbled away on three legs; and it is believed by the Laplanders, that the fox will sacrifice the leg by biting it off, in order thereby to regain his liberty: but is it not more rational to suppose the loss of leg to be occasioned by the bone being first broken by the trap, and then the fractured part of the leg separated, by the frequent and violent efforts to extricate himself from the inthralment? No creature, except man, has been observed to make a willing and voluntary sacrifice of life or limb.

Martens are found in Finmark. Of these there are three kinds or species; the *stone marten*, so called from his frequenting rocky places; his fur is short and blackish, and his tail of a yellowish colour, with an ash coloured throat. The second species is called the *birch-marten*, as he frequents the spots where those trees grow; his fur is yellow, the tail of a purplish colour, and the throat white. The third sort is called, for the like reason, the *fir-marten*, being found amongst the fir-trees; its fur is yellow, the tail of a tawny colour, and the throat white. The martens are all taken in traps.

The *gulo*, or glutton, called by the Danes *vieffras*, and by the Laplanders *gjeed'k*, is to be met with in Finmark; but it is rather an uncommon animal. It is furnished with sharp teeth and claws, and although greatly inferior in size to the rein-deer, is said to have frequently killed those animals; but this is effected rather by surprise than by open assault, and in the following manner.

The glutton climbs up a tree, and when he sees a deer within his reach, he leaps up its back, and fastens himself by his teeth and claws until he has killed the animal. The glutton is charged with a most extraordinary pertinacity of appetite, and is said to ease his stomach when overloaded, by squeezing out its contents between two trees; after which he falls to eating again, and continues the like practice as long as any part of his prey remains uneaten. This curious circumstance respecting the glutton is a tale that has been often told, and derived from ancient times, yet does not on that account deserve the more credit. The better and more probable opinion is, that this animal having been espied between two trees, in order, by rubbing against them, to relieve the itching of his skin, it has been supposed that he had placed himself there for the purpose before-mentioned; and hence this story has taken its rise, and seems to have given name to the beast. The glutton is moreover accused of robbing those repositories we have already described, in which the Laplanders store the venison intended for their summer emigration; but this is a theft which, unless there is evidence that the animal was caught in the fact, is as chargeable to the wolf or fox, both of them of great notoriety as dexterous thieves, and confessedly here in great numbers. The skin of the glutton fetches a great price, and is used for muffs and the linings of coats. From the skin of the legs, the Lapland women cut out patterns for gloves, which they work with tinsel after their fashion.

The beaver is found in several parts of Finmark by the side of lakes

lakes and rivers. Wonderful stories are related of this animal, of his extraordinary sagacity in constructing his habitation for the winter, which includes lodging and store rooms, besides a cold bath; moreover, that in the construction of this habitation, he makes use of his tail as a trowel, &c. all which are entertaining in the perusal, but exceed the utmost stretch of probability. As impossible is it to believe that the beaver should suffer himself to be drawn about by his fellows, in order to form a carriage for the conveyance of birchen sticks for building; a circumstance which is inferred from the appearance of their fur being much rubbed, as if this might not be more naturally accounted for, by supposing their skins to be thus stripped of their hair from creeping out and in of their haunts. These narrations are to be seen in the accounts of some travellers, but we would rather refer to them, than give them a place here, as we wish more to inform than merely to amuse. The *castoreum* prepared from the beaver is used as a medicine, and is said to have the power of driving away the whale from ships or boats wherin it happens to be found; for which purpose fishermen occasionally take it to sea with them. The Laplanders dispose of the skins they take in Russia, the use of which in the manufacture of hats, and in lining garments, is well known. White beavers have been observed in some parts of Lapland; but this is merely a variety, or rather a monstrous production of nature, and to be classed with instances of the like kind in other four-footed animals as well as birds. The beavers are taken in their lurking places by a trap door, which

thus up its entrance, and prevents the animal's egress. The Laplanders give to the beaver the name of *majeg*.

Otters abound in Finmark, where they are called by the Laplanders *zhjevres*, a name which is applicable to the male as well as female of this animal. There are three species or varieties of the otter, as, 1st. The sea-otter, called by the Norwegians the *hav*, or *brem-otter*; the fur of this otter is coarse, and its colour a pale yellow: these are very common, and the price of a skin is a Danish crown. 2d. The bay-otter, called in Norway the *fiord-otter*, and so named because found in the bays and harbours: this otter is smaller, and his fur brighter than the former, and of a blackish colour; a skin of this otter will produce three Danish half crowns. 3. The fresh-water-otter, called in Norway *vas-otter*, having a white breast and raven-coloured back. The skin of this otter is worth five Danish half crowns, and often more. The otter is easily tamed, and may be trained to catching fish for the benefit of its master; and notwithstanding it is but a small animal itself, it is able to seize and bring a large cod-fish to shore. Whilst this animal is feeding, he constantly keeps his eyes shut, which enables the hunter to approach him until he is within gun-shot. Besides shooting, the Laplander takes the otter in snares and traps, and sells the skins to the Russian merchants, who make considerably more than cent. per cent. by disposing of them again in Tartary.

The coast of Finmark abounds with seals, which are found there of various sizes: the skins of some kinds are black, of others white, and of some of both colours mixed. There are likewise

some

some of that species of animals which are known by the name of sea-horses (*trichechus rosmarus*), by the Norwegians called *hvalros*, and by the Laplanders *morsk*. The sea-horse has broad nostrils, a thick tongue, and large prominent teeth, by which he can fasten himself to the rocks so as not easily to be drawn from them: these teeth are, for their superior whiteness, preferred to ivory. The Laplanders sometimes shoot them, and often attack them with clubs when they come on shore at the season of their breeding. On these occasions the males make a stout resistance, and the females will fight in defence of their young till they themselves are killed. This animal, as well as the seal, is amphibious, being as often seen on the rocks and on the beach as in the sea.

Squirrels, to which the Norwegians give the name of *ikorn*, and the Laplanders *orre*, are taken in many parts of Finmark. They are generally shot with blunt arrows from cross-bows, to preserve the beauty of their skins. When they are sold, they are put up in lots of forty skins each, which produce to the first seller a crown or dollar.

The ermine, which is a kind of weazole, breeds in Finmark in immense numbers: to this little animal the Laplanders give the name of *boitta*. The point of its tail is black, and the rest of its body white. It is taken in traps, and, like the common weazole, is exceedingly voracious and bold, frequently attacking animals of a much larger size than itself. When caught in a trap it constantly voids its urine, which, if it touch the skin, generally stains it yellow and spoils it.

GENERAL REMARKS

In Finmark and throughout Norway are found immense numbers of mice, called by the Laplanders *lemmick*, which are the prey of both birds and beasts. It is a received opinion amongst the Laplanders, that these mice drop down from the clouds; a false notion, which appears to have been conceived from the circumstance of many having been observed to fall from on high, no doubt carried off by birds which have been forced to loose them from their claws, owing to the vivacity of the little animal's struggles to obtain its liberty.

Notwithstanding the rigour of this climate, it is observable that animals, wild as well as tame, are here remarkably prolific. The ewes often bring twins twice a year, and the she-goats produce constantly two kids, and sometimes three at a birth.

Many birds are to be met with in Lapland, which have not yet been discovered elsewhere, hence the epithet *Lapponicus* generally denotes some rare species peculiar only to that part of the world. Of this description is the *Jcolopex Lapponicus*, or the Lapland wood-cock, which has a beak turned up at the end. It is pretty common in the bogs of Lapland, though it is not known to inhabit, or to visit other countries: yet it is certain, that this bird is only there during the summer, and that it migrates to some other climate in the winter; but where that is, remains a problem. The historical part of ornithology is still very imperfect, nor can it be expected to advance rapidly, as the information must be collected by degrees, and abstracted from accidental observations. "It would be necessary," says Buffon, "to follow the birds every where, and

" and to begin with ascertaining the principal circumstances of
" their passage : to become acquainted with the direction they
" take, their resting places, and their abode in every climate ; and
" to observe them in all those distant quarters. It will therefore
" be the work of time, and require the attention of many succeed-
" ing ages, to be able to form as accurate notions respecting the
" birds, as we are in possession of with regard to the quadrupeds.
" To accomplish this undertaking, there ought to be constant
" observers in every country where the birds sojourn ; because it is
" impossible for a traveller, who merely passes through, to bestow
" sufficient time and care upon every thing that ought to be
" taken into consideration." It is probable that the Lapland
woodcock may, in his journey, keep a direction through unculti-
vated countries, at least through such as are not inhabited by
people that might be led to observe, or be able to communicate,
the history of that bird. It seems highly probable, that in winter
they frequent the milder climate of Chineſe Tartary, or the
southern parts of Asiatic Russia ; and that in summer they pass
into Lapland by the way of Russian Tartary, or of Siberia and
Archangel.

The only birds that stay in Lapland during the winter, are the *ſtrix* and the *tetrao*. All the aquatic birds are by the ice compelled to change their habitation ; and of the others which are seen there, the greatest number only come for the purpose of breeding. And surely in no country could these birds enjoy more tranquillity, and carry on their amorous intercourse with greater peace

and comfort. The insects and wild berries furnish them with a plentiful subsistence : and as there is no night, which would oblige their young ones to fast, or check their growth by its chilling cold, they are able to divest themselves of their family cares in a much shorter space of time than they could do in other districts.

I have, in the course of this work, mentioned more than once the songs of the birds, with which the woods of Lapland re-echo. I have often been astonished to hear in these places birds sing very charmingly, which I had before considered as mute, and totally deprived by nature of all vocal power. The *motacilla trochilus* of Linnæus, which comes to Italy about autumn, is in Lombardy called *tui*, because its short and abrupt cry bears a resemblance to this sound : but the same bird may justly be termed the nightingale of the north. It settles on the most lofty branches of the birch-trees, and makes the air resound with accents melodious, bold, and full of harmony. This is likewise the case with the *emberiza geniclos*, which has a clear and strong voice ; and animates with its musical notes the shades of the alder and willow-trees, that grow by the sides of the brooks and rivers.

But there is another bird, which more highly deserves our admiration, as it surpasses all the rest by the beauty of its plumage and the sweetnes of its voice : this is the *motacilla suecica*. It lives in the bushes of marshy places, and particularly likes to perch on the dwarf-birch, (*betula nana*, Linn.) ; its flight is generally low : it makes its nest in the moss, and lays between five and seven eggs, of a greenish colour, nearly resembling that of the moss, with

which

which they are surrounded. It feeds on insects and worms, and I have seen several of them with caterpillars in their beaks, which were destined for their young. The Laplanders call this bird *saddan kiellinen*, which signifies *hundred tongues*, and expresses the nature of its song; for this constantly varies, and is an imitation of the voices of almost all the other birds. To the beauty of its notes it joins that of its feathers, which are of a sky blue colour, bordered about the throat with a black line, and after that with one of a rusty appearance. It seems as if nature, charmed with the melodious excellence of the song, had been willing to embellish even the outside of the organ that produced it, in order to render her work quite perfect. No bird I know of would be a more noble object for the captivity of a golden cage, to adorn the magnificent apartment of some of our ladies, who, tired with the music of art, might, even in the midst of a great town, be delighted in lending their ear to the simple harmony of nature. Luxury, however, has not yet made war upon this charming songster, nor spread its nets to ensnare him, because he has hitherto remained unknown; and fortunate will it be for that beautiful creature, if it always keep aloof from the habitations of men, and shelter himself from their search by inaccessible retirement. This bird is beyond comparison superior to the nightingale, and far better calculated for a companion in a room. The voice of the nightingale is too shrill and powerful, and on that account more agreeable at a distance than near: the nightingale, besides, is very ordinary in its appearance; whereas the *motacilla suecica* shines

with a brilliant plumage, at the same time that it enchanteth the ear by the variety of its notes, which it displays with singular art, changing and modifying them in a manner quite peculiar to itself.

The sea and land birds, which are common in Norway, are all to be found in Finmark, and in great variety. Of these, some are stationary and remain all the year, whilst others, supposed to be migratory, are seen only at particular seasons. Of the first sort are those of the eagle and falcon-kind, owls, ravens, daws, partridges, the eider duck, sea-crow, and several species of water fowl. Among those which appear in summer, and are not seen after autumn, are the wild goose, a fowl called in the Norway tongue *bruuskoppen*, from a prominent piece of flesh on its head, water-hens, snipes, woodcocks, and a great number of small birds.

Some of the falcons are intirely white; these, however, are but rarely seen; the feathers of their wings and backs are commonly of a grayish colour, white under the breast, with yellow beaks and legs. This tribe is very numerous; they breed amongst inaccessible rocks, and if taken young are readily trained for the diversion of hawking: accordingly, the hawks bred here are in great request, and much sought after from Germany and other parts.

White owls have been found in the woods of Finmark: this bird is larger than the common species of owls, which have white wings spotted, with black winking eyes, a small head, broad beak, the feet covered with down. These owls have their nests in precipices of the mountains.

As I am speaking of the genus owl (*Strix*), I think I shall gratify



Strix Lapponica.

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tify the curious in the study of ornithology, by giving them a figure of the scarcest strix that is any where to be met with. It is peculiar to Lapland, and has been called by Mr. Thunberg *Strix Lapponica*. Its specific character is as follows:—

“ *Strix Lapponica* : inauriculata, corpore albido nigro, fasciato, maculatoque.”

It is larger than the *otis*, and smaller than the *nyctea* of Linnaeus. The annexed copper-plate will supply the place of a description: but it deserves to be noticed, that only two specimens of this bird stuffed, exist at present in Europe, and these are both in Sweden. The one in the museum at Upsala, is that from which my drawing was taken; Mr. Thunberg having politely allowed me to convey it to my lodgings, that I might copy a likeness at my leisure. Very little is known of the history of this bird. I have met with it myself in Lapland, and even pursued one, but without success, as they are extremely shy, and will not let men come near them.

Crows breed in prodigious numbers in Finmark, and in other parts of Norway, and take their flight in flocks along the sea shore. These birds, through cold and hunger, become very tame in winter; at that season they hover about the tents of the Laplanders, and even venture to come within them, and will pick up every thing within their reach. Besides these, the ravens are very numerous, and found to be bold and destructive, seizing fish hung up to dry, and birds taken in snares, and even attacking sheep, and plucking out their eyes, or tearing open their bellies.

The pie or magpie is to be met with in certain districts, but not in any great quantity : to this bird the inhabitants of Norway have given the name of *tun-fugl*, on account of its attachment to the habitations of mankind. If the pie makes his appearance in parts where he is not commonly seen, it is thought to be a sign of the approaching death of some principal person residing on the spot.

Among the pies, there is one of which the missionary Leems makes no mention, though it claims attention, since Mr. Thunberg seems to be decidedly of opinion, that it is not a variety of the common pie, but a distinct species, only to be found in Lapland. As it has, as far as I know, never been figured before, I deem it incumbent upon me to present it to the reader. Mr. Thunberg has named it *Corvus Lapponicus*, and described it in the following manner :—

“ Char. Spec. *Corvus Lapponicus* : *fordide albus, capite, collo,*
“ *pectore, alisque basi cinereo-fuscis.*”

“ It is found,” says Mr. Thunberg, “ in the Tornca Lapmark. The general characteristics of this bird are the same with those of the common pie : it is, however, very wild, and seldom suffers any one to approach it within shot. It builds its nest upon trees, in mountainous or high situations : it is not every year to be seen near houses ; but when it comes, it generally makes its appearance towards the end of autumn, or in the beginning of winter, accompanied with about four young ones. In winter it shews itself chiefly when the weather is about to





" set in very severe, and it serves to the peasant as a sign, that the
" cold will be intense, and the snow abundant. This happened
" in the year 1796, according to Dr. Eklund's* observation, who
" had the goodness to procure me a specimen of this bird, which
" was hitherto quite unknown. At first sight it seems to resem-
" ble the common pic, but it is less by one-fourth part, and dif-
" fers from it in its manners and habits. The tail tapers to a
" point, the feathers being of unequal length: the feathers of the
" belly, the upper part and points of the wings, are white; the
" neck, breast, the fore part of the wings, the thighs, and the tail,
" of an ash-colour, with this difference, however, that the tail is
" more light above: the beak and the legs are black."

There is a peculiar kind of fowl commonly found in the woods throughout Finmark and all Norway, which seems to be a variety of the bustard or dotterel. To the male the Norwegians give the name of *todder*, which they pronounce as if written dotter; the female they call *roey*. The male is about the size of a full-grown turkey of the largest breed, and like that fowl he occasionally spreads his tail and shakes his wings: his belly has black and white feathers, his back and wings are of an ash-colour. The hen is not so large as the cock; her wings and body have feathers of a dusky yellow, with spots. The flesh of this fowl is equally esteemed with that of the common bustard.

Partridges are very numerous; they are of two sorts, the one

* Dr. Eklund is a distinguished ornithologist, and particularly conversant with the Swedish birds.

frequenting the mountains, the other keeping to the plain. In summer they are of the colour they are seen elsewhere, but in winter they have white feathers; and when they lie half covered with snow, they are scarcely discernible from it. Partridges are taken by the Laplanders in great numbers after the following manner: a low hedge is made with twigs of the birch-tree, openings being left at small distances just large enough for the birds to creep through. In these openings snares are placed of cows' hair, with a running noose; and the partridges, coming to feed on the buds of the birchen boughs, and endeavouring to pass these holes, are taken in the snare.

Pigeons and doves (called by the natives of Norway *ringel duer*) are found in many parts of Finmark, and on the borders of Russia, but they are by no means a common bird. There is a kind of plover (*charadrius*) which, in the Danish language, is called *brokfugl*, much admired for the glossy black of its feathers, and the delicacy of its flesh. This bird is very common in Denmark, and frequently found in Finmark; it appears early in the spring, and is not seen after the summer is past, during which time it makes its nest, and breeds its young, which have at first brown spotted feathers that are afterwards replaced by black. Of this bird there are found some varieties, which have different names.

Besides these, there are several sorts of thrushes, the flesh of which is thought to be delicate. There are likewise woodcocks, snipes, snow birds, linnets, goldfinches, siskins, and a variety of other small birds. The cuckoo is found here, but the starling,

the house sparrow, and some other birds common to other countries, are not to be met with.

The swan is found amongst the sea-fowls, and taken by the Laplanders in snares contrived for the purpose.

The wild, or, as it is called in Norway, the gray goose, is a yearly visiter in the summer season, and takes up its residence in the smaller uninhabited islands on the sea-coast, where it breeds: in autumn it leaves Finmark, and returns southward, accompanied by its young. In these flights the wild geese are formed into so regular a body, as to appear to be conducted by a leader, a single goose seemingly bringing up the rear. They are observed to have particular stages or resting places in their migration, where they remain for nights, and sometimes whole days, placing a goose as sentry, to be on the watch, and give an alarm upon the approach of an enemy. Notwithstanding the extraordinary wariness of this fowl, the Laplanders shoot great numbers with their pieces, and take many more by various devices: they are often surprised in their retreats, when, owing to their having shed their wing feathers, they are unable to fly, and become an easy prey to their pursuers, who hunt them yearly during the time they remain in this state. There is a variety of this fowl called the Finmark goose, which differs both in size and colour from the wild sort.

Of ducks there is in Finmark a very great diversity; amongst these the most remarkable is the *eider duck*, called in the language of Norway, the *edder fugl*. These are found in large numbers, and sometimes seen in flocks of a thousand. Their down feathers

are valuable, being of a peculiar softness, and much esteemed on account of their lightness and warmth. This bird is easily taken, and will not readily quit its nest on the approach of a man.

The sea-coasts abound with pelicans, cormorants, and other birds, which breed most plentifully in holes of rocks scarcely accessible: the Laplanders, however, contrive to take the eggs of these fowls in considerable quantities, and oftentimes the birds themselves by means of baited hooks fastened to ropes.

I shall conclude this section by giving a list of the quadrupeds and birds peculiarly belonging to Lapland and Finland, according to the system of Linnæus.

QUADRUPEDS.

Canis Lagopus; the white fox, likewise the black, and the one marked with a cross upon the back: these are generally considered as varieties, though some naturalists seem inclined to distinguish them as species.

Viverra Lutreola, or *Mustela Lutreola*, (by the Finlanders called *Tichuri*) resembles the marten.

Mustela Gulo, or *Ursus Gulo*, the glutton.

Mustela Nivalis, the white weasel.

Ursus Arctos, the bear.

Castor Fiber, the beaver.

Mus Lemnus, the Lapland marmot; in some years very abundant.

Sciurus, the squirrel.

Cervus Tarandus, the reindeer.

BIRDS.

Falco Gentilis: on the mountains of Dalecarlia.

Strix Scandiaca; little known.

Strix Ulula.

Strix Lapponica. New.

Otis Tetrao.

Otis Arctica.

Corvus Infuscatus. Very plentiful in West Bothnia.

Corvus Lapponicus Thunb.—See the Transactions of the Academy of Stockholm.

Picus Tridactylus, the three-toed woodpecker, remarkable for having only three claws, when all the other species of picus have four. It is rather scarce in Lapland, but more common in Norway.

Anas Fusca,

Anas Nigra,

Anas Marila,

Anas Spectabilis,

Anas Albifrons,

Anas Erythropus,

Anas Hiemalis,

Anas Crecca. These birds also come to Stockholm in spring from Finland and other parts: but they pass the summer in Lapland.

Alca Arctica, and *Alca Alce*, are more frequent on the Frozen Ocean than on the sweet waters of Lapland. I have killed some of them near the North Cape.

Procellaria Glacialis.

Pelecanus Carbo, and *Pelecanus Baffanus*, are found in the gulf of Bothnia.

The *Colymbi*, *Lari*, and *Sternæ*, are not exactly indigenous in Lapland.

Larus Glaucus; lives in the Frozen Ocean.

Platalea Leucorodia; seldom found in Lapland.

Ardea Nigra, and *Ardea Alba*, are said to be found in Lapland, but are not indigenous.

Scolopax Phaeopus.

Scolopax Glottis, the great dark-coloured woodcock, with a very long beak, the lower half of which is red. It is also seen in other places, but rarely.

Scolopax Fusca.

Scolopax Lapponica.

Tringa Lobata.

Tringa Alpina. This species was also seen in Scania in the year 1789.

Tringa Pugnax, the ruff and reeve.

Charadrius Morinellus, *Charadrius Apricarius*, and *Charadrius Pluvialis*. These, as other birds of passage, which feed upon flies and insects, visit different parts of the world in spring and autumn, according to the different climates and the food they require.

Tetrao Lagopus. In winter it is quite white; in summer it resembles the female of the grouse, except in the tail feathers, which are always black.

Tetrao Bonasia.

Turdus Rosaeus; lives during the summer in Lapland, where they shoot it. It is said also to be found in Egypt, perhaps at a different season.

Emberiza Nivalis. It wanders sometimes as far as Germany, when the winter is very severe.

Fringilla Lulenfis; difficult to meet with and to ascertain by the description of Linnæus.

Fringilla Lapponica.

Fringilla Montana: frequently found in the more southern parts of Lapland, and even in Upland.

Motacilla Suecica; by the Laplanders called *Saddan Kiellinen*, which means “(the bird) of hundred tongues.”

SECTION XIV.

Of the Amphibious Animals, the Fishes and Fisheries.

If we would strictly follow the arrangement of Linnæus, we should now speak of the *amphibious animals* in Lapland, before we come to treat of the fishes and the fisheries. However the amphibious tribe is by no means numerous, as it only consists of the *lacerta palustris*, and, we may perhaps add, the *petromyzon fluviatilis*. The *lacerta palustris* is found in several other places besides Lapland. There are so many fabulous accounts of this animal among the inhabitants of the North, that one may easily be misled by the different stories that are related of it: they, for instance, tell you, that it lives in the water; that it frequently bounds up from the water, or the surface of a lake, and settles on the branch of a tree; that there it begins to laugh, or to make a noise like that of a man's laughing; and so on. But these wonderful tales would probably vanish before the enquiring eye of an attentive observer. The *petromyzon fluviatilis* follows in spring, when it begins to thaw, the course of the rivers, and becomes the prey of the *colymbi*, and other water-fowls.

The rivers in Finmark contain great plenty of salmon in the season; and on the coast are found cod, hake, ling, haddocks, whitings,

whitings, skate, hollibut, and a variety of other fish in abundance. These are caught and prepared for foreign markets, a traffic which might be carried on to a more considerable extent than what it actually is, so as to supply almost the whole of Europe. It is not our intention to enter into a detail of that subject, but merely to give a concise account of the fish in these seas, and the methods adopted by the Laplanders for taking them, together with some particular circumstances respecting these matters, which have not been noticed by other travellers.

About Candlemas-day the whales appear in astonishing numbers upon this coast, not only in the open seas, but also in the bays and harbours, being allured by the pursuit of the cod, herrings, and other fishes. These latter endeavour to escape by approaching close to the shores, where they are taken by the fishermen in the greatest quantities. There are several species of the whale; but this animal has been so fully and so often described, that it will be unnecessary to say any thing of it, further than to observe, that they are frequently cast on shore upon these coasts, when, as is supposed, they have left the deep water on being wounded by the harpoons of fishers, or by their great enemy the sword-fish, hereafter to be mentioned, and by unwarily coming too nigh, they are stranded and taken by the Laplanders.

Many kinds of fish belonging to the cetaceous tribe, are found in these seas. Among them the most remarkable is the sword-fish, an inveterate and declared enemy of the whale. This fish, called sometimes the *sea-hound*, does not differ much in shape and

size from the *grampus*, or small whale. The weapon, which is likened to a sword, constitutes his back fin; and with this, and his sharp teeth of about a finger's length in both jaws, he attacks the whale whenever he meets him, and pursues him until he drives him on shore or kills him. That fish does not only engage the whale singly, but also in company with other species; so that the great tyrant of the deep, to whose insatiable appetite such numbers of fish become every moment a sacrifice, is not without his enemies, by whom at length those victims of his voracious despotism are sure to be avenged.

Another cetaceous fish is here known by the name of *springer*, which, in the language of Norway, signifies a jumper. This name is given to it because it is observed to leap frequently out of the sea with great force, after which it falls back with a loud noise. This fish is near three yards in length, and in winter generally keeps the main sea; but in the summer it often seeks the shallow waters of the bays, when, being discovered by its frequent leaps, the fishermen surround it with nets, to avoid which the fish throws itself on the beach, and is seized upon without difficulty.

Porpoises, to which the Norwegians give the appellation of *niser*, are seen in great numbers. The Laplanders sometimes find them in calm weather sleeping on the surface, and thus shoot them, which they rarely succeed in when they are rolling in the water. The Laplanders, as well as the inhabitants of Finmark and Norway, are exceedingly fond of the flesh of the porpoise.

The shark is found in all seas, but abounds in that of which we

are speaking: it is called, in the Norwegian tongue, *flaaekierring*, and by the Laplanders, *akkalagges*. There are several species of shark, all of which yield a great quantity of oil or blubber. The Laplanders eat freely of the flesh, which they cut into steaks and broil. So voracious is this fish, that sharks have been taken with other sharks of a smaller size in their stomachs, and even with the hooks, lines and weights which were laid for other fish, having swallowed not only the fish that were thus caught, but the whole tackle together with them.

The hollibut, skate, turbot, and flounder, are taken in the Northern Ocean in vast quantities. The Norwegians call them by the general name of *quejta*, but the Laplanders have distinct terms for each. The skate and flounder scoured and dried, the heads, fins and tails being cut off, are sent into Denmark and other countries of the North, where they are eaten in that state, and considered as an agreeable relish.

The cod-fish consists of several species; these are found in the seas of Finmark in great plenty, and in the highest perfection: accordingly they form a considerable article of commerce. There is a species of cod which remains the whole year on that coast, and which, at certain seasons, is poor and lean. Another sort shews itself about Christmas, and is at that time very full of roe; and a third kind is much esteemed, which is called *torfke*, and known to the English by the same name, though it is sometimes written as that is pronounced, viz. *tufk*. There is moreover a species which, from its Norwegian name *modde*, is called *mud-fish* by

by the English fishmongers, to whom it never comes but in a pickled state. The Laplanders take the cod and torske by line and hook only, but in some districts of Norway they are caught with nets. They are found on different parts of the coast at different seasons, but are never known wholly to forsake it; accordingly the time of fishing for them varies with the place. The cod and torske, which are taken in the winter, are carefully piled up as they are caught, in buildings constructed for the purpose, having their sides open and exposed to the air. Here they remain frozen until the following spring, when the weather becoming milder, they are removed to another building of a like construction, in which they are prepared for drying. The heads are cut off, the entrails taken out, and the remainder hung up in the air. Fish caught in the spring are immediately conveyed to the second house, and dried in the above manner. The fish thus cured, from their round and stiff shape, receive the names of *rund-fjlk*, or *flock fjlk*, and are known to us by the last name, viz. *flock-fish*. The cod, torske, ling, &c. caught in the summer season, on account of the warmth of the weather, are only to be preserved by the common methods of curing with salt. The merchants who purchase stock-fish attend to the brightness of the colour, and observe that the flesh be not soft and spongy, both which defects are occasioned by the unfavourable state of the atmosphere at the time of exsiccation.

Herrings are found in these seas in immense profusion, but the Laplanders have neither nets nor skill to take them; accordingly they

they are only used by them as bait for such fish as they do catch. Indeed, considering the incredible numbers of fish in this neighbourhood, it appears wonderful that the fishery is not carried on with more spirit and ability; but there seems the like inattention here to this species of human industry, as is observable in the fisheries on the northern coasts of Great Britain. It may perhaps be the policy of Denmark rather to promote the salmon and cod fisheries than that of herrings, and probably the impossibility is seen of rivalling the Dutch at foreign markets, who have obtained a preference by their excellent method of curing this fish. Besides the fish just mentioned, these seas furnish sturgeon, lampreys, flounders (called in Norway *flynders*), soles, turbot, and most of the fish to be met with on other coasts, besides lobsters, crabs, prawns, and other shell-fish. The lakes are stored with pike, perch, trouts, eels, and other fresh water fishes.

Before we close our catalogue of Lapland fishes, we should think ourselves unpardonable not to notice what has been said of a sea-monster called the *krake*, or, as the word has been used in the plural number, the *kraken*. This prodigy is supposed to be a fish that rarely appears on the surface, but has occasionally been seen by fishermen who were looking for a proper place to throw their nets. They were sometimes surprised on such occasions at finding, after the first time they threw the lead from their boat, in order to ascertain the measure of the water, that the apparent depth continued to diminish every time they repeated the experiment; and imagining that this decrease could be only occasioned

by the lead having lighted upon the back of some immensely large fish, which must be in the act of rising to the surface, they set themselves about rowing from the spot with all possible haste; and when it happened that they could perceive the fish upon its emerging to the surface, it appeared covered with weeds, coral, and marine plants. There is a tradition in those northern countries, of a Romish Bishop landing upon the back of one of these monsters, and celebrating mass upon it during the time he remained there. Such are some of the particulars which have been related respecting this extraordinary production of nature; stories that appear to have been swelled out and augmented in the course of narration from one credulous hearer to another, and in all likelihood had their origin in some dead whale of extraordinary bulk being seen floating on the surface, on whose back had grown those marine plants, and other substances which usually fasten to inert bodies in the seas. This incident afterwards was increased to that of a floating island, or some sea monster as large as an island, to which at last they gave the name of the *krake*. In short, the tale of the *kraken* is supported on much the same ground as the stories of ghosts and hobgoblins; for they too are believed by many, though no evidence can be produced of any credible person that has seen them.

The wives of the maritime Laplanders share with their husbands in the employment of fishing, which is not the case with women in general in other parts of Norway. The mountain Laplanders, when removed in the summer season to the sea coast,

engage

engage in that occupation during the time they stay. In winter, when the lakes and rivers are closely bound up with ice, they contrive, nevertheless, to pursue the avocation of fishing; and even take considerable quantities, by cutting holes in the ice, and putting their nets through them into the water under the ice. The Laplanders use, for their nets, the bark of the birch-tree instead of cork; and as they grow no hemp, they form their ropes and lines of the sinews of the rein-deer.

The river Tana takes its rise in the distant mountains of Lapland, runs through East Finmark, and after receiving in its course several small streams and torrents from the mountains, at length empties itself with a very rapid current into the sea at a bay to which it gives its name: this river is remarkable for producing salmon of an extraordinary size and rich flavour. The salmon fishery begins here early in the spring, and is over at the end of the second week after Midsummer-day.* Large quantities of salmon are also taken in the river Alten in West Finmark: this river likewise gives name to the bay in which it meets the sea.

* It may not be amiss to specify the genus *Salmo*, as it is found in that country, according to a communication from my valuable friend Dr. Quenzel. It is as follows:

Salmo Salar, the common salmon, which goes up the rivers in summer for the purpose of depositing its spawn.

Salmo Alpinus is also found in the lake of Wennern in Sweden.

Salmo Lavaretus, called *fik* by the Swedes, is caught at the cataracts when it is attempting to mount up.

Salmo Thymallus: *harr* in Swedish. It is also to be met with in the rivers of Westrobothnia and Angermania.

The fishery in this river begins about Midsummer, at which time the salmon are in full perfection; after this they are observed to decrease in size and goodness. The salmon is caught in weirs, and the fishery itself put under certain regulations. The following is the method of pickling these fish: they are first split, carefully washed, and salted with the best salt that can be procured; and after lying some little time in the salt, they are packed up in oaken casks and pressed down with weights. The cask is kept open, and brine daily poured in until the fish is found perfectly cured, when the cask is fastened up.

From the produce of the fishery a tenth part is deducted in kind, which tenth is equally divided into three parts, one of which goes to the king, another is for the use of the pastor or minister of the church, and the remaining third is appropriated to keep the church in repair.

To the fishes of Lapland should also be reckoned those which inhabit the Northern or Frozen Ocean, but we cannot here enter into a description of them; much less would it suit our purpose to enumerate those which are common in other countries.

SECTION XV.

Of the Insects and Testaceous Animals of Lapland.

SINCE Dr. Quenzel's travels in Lapland, this country has furnished many interesting objects to the entomologists and collectors of insects throughout Europe. In the time of Linnaeus there was not a single insect of the class *lepidoptera* known as indigenous in Lapland; and it is almost incomprehensible how the great *phalænæ* and *papilios*, that hunt the nectaries of those flowers which embellish these northern districts, could have escaped the searching eye of so attentive a naturalist. Dr. Quenzel discovered several species, and brought with him a great number of specimens, which were soon scattered over Germany, and all countries where these objects are esteemed and collected. It is an unfortunate circumstance, however, that collections of that kind are often considered as mere articles of show; and that the entomologists are frequently nothing more than walking inventories, that have their heads filled with a gothic mixture of Greek, Latin, and barbarous names.

Entomology, when studied by a philosophical observer, may become a pursuit of great importance to society, and lead to discoveries of essential benefit; but while the zeal of entomologists consists

consists in a rage of making collections, in bringing together what is beautiful or singular, and serves to amuse an empty curiosity, little advantage is to be expected from their labours. The true object in these researches ought to be, to observe the manner in which the insects live, what qualities they possess, how they are transformed, and what influence they have upon the general economy of nature. How much remains yet to be discovered in these little animals, in whose very smallness nature shows herself so great? Some of their senses, as that of hearing and smelling, moreover the functions of the antennæ, the form of their eyes, their love, their generation, their means of defence, and of providing for their different wants; all these are things that are as yet but very imperfectly known. It is among the insects that we perceive the most extraordinary deviations from the common course of nature. Thus we find that the *aphides* bring forth eggs and living young ones several times following, after only having been once impregnated by the male. In the genus *phalænæ* there are some of which the females are without wings, and never enjoy the pleasure of flying except when they enjoy the embraces of the male, that carries them into the air, as it were, to indulge the rapture of love in the arms of zephyrs. Who is ignorant of the sagacity, industry, and regularity of the bees? Who would have imagined that there are insects that re-produce their limbs, and even their heads, when cut off? The *circulio antiodontalgicus*, which has the power of allaying the tooth-ach; the *meloë majalis*, useful in hydrophobia; the *lytta vesicatoria*, which draws blisters; the

the *bombyx*, or silk-worm, and others, are insects for the utility of which we are indebted to the observations of true entomologists.

There is still a wide field open for discoveries of the like nature. If, for instance, it were ascertained which caterpillars are most injurious to the vegetation of young trees, our endeavours to destroy them might be directed accordingly. Several are pernicious to the grain; these also might be pointed out and successfully subdued. On the other hand, the entomologist might show new advantages to be derived from some insects that are as yet unknown. The *termes*, *blattæ*, *dermestes*, *tineæ*, may perhaps at some future period be looked upon with less apprehension and dislike than those insects which are now esteemed perfectly innocent; and the husbandman, by the exertions of the entomologist, be freed from the fear of seeing the fields that he cultivates with the sweat of his brow, changed into barren and unfruitful ground.

The new species of insects which have been found in Lapland, offer as yet no striking discoveries of practical benefit. The first step always must be to know a thing before we can investigate its use, and in this we are greatly assisted by a scientific method and classification. Travellers have hitherto only been able to search for and gather materials; they have made collections, and given lists and descriptions: of this kind will also be found to be that which is presented to the reader in this work. To render it more interesting, the figures are added of such insects as have not yet obtained a place in any collection of prints. I

shall



shall proceed to the catalogue of insects; after previously noticing an observation, communicated to me by Dr. Quenzer, viz. that the *phalænæ*, which with us only appear towards the evening, and fly in the night, follow quite the opposite practice in Lapland; they fly about in the day-time, and go to rest, and disappear when the sun is near the horizon. This is a fact, for which I cannot account, and which I must leave for others who are more competent to explain.

LIST OF INSECTS.

Scarabæus Fætens.

Scarabæus Depressus, s. Fennicus.

Scarabæus Sabuleti.

Scarites Arcticus.

Trogofita Thoracica,

Trogofita Corticalis.

Carabus Borealis,

Carabus Nivalis,

Carabus Guttula,

Carabus Alpinus: it sleeps in the night on the grass.

Carabus Apricarius: on the mountains of Dalecarlia.

Elaphrus Striatus: on the banks of rivers.

Dytiscus Arcticus,

Dytiscus Dolabratus,

Dytiscus Affinis,

Dytiscus Alpinus,

Dytiscus

Dytiscus Lineatus.

Gyrinus Bicolor : in Finland.

Elophorus Fennicus.

Xylita Ferruginea.

Hypulus Quadriguttatus.

Anthicus Oculatus : in Finland.

Anthicus Ferrugineus.

Cantharis Alpina.

Cantharis Pilosa.

Malachius Flavipes ; in Finland.

Dermestes Schaefferi.

Dermestes Glaberrimus, on the mountains of Dalecarlia.

Dermestes Ater ; in Finland.

Silpha Tomentosa.

Silpha Rugosa : this insect is to be met with in any part of Sweden ; and in Lapland it abounds.

Coccinella Analis, in Finland.

Coccinella Trifasciata.

Coccinella Bothnica.

Coccinella Hyperborea.

Coccinella Arctica.

Coccinella Bifasciata.

Cassida Sanguinolenta, in Dalecarlia.

Chrysomela Lapponica.

Chrysomela Dispar : Var. γ , δ , ζ .

Crioceris Betulae, in West Bothnia.

Cistela Axillaris, in Finland: the name is not suitable.

Cryptocephalus Affinis, in Finland.

Cryptocephalus Cordiger: Var. γ , δ .

Cryptocephalus Variegatus,

Cryptocephalus Sexpunctatus: Var β .

Cryptocephalus Coryli: Var. γ .

Cryptocephalus Pini: Var. β .

Dryops Aenea, in Finland.

Dasytes Linearis.

Lymexylon Paradoxum, in Finland.

Serropalpus Striatus: *Dircea barbata*, Fabric.

Ripiphorus Fennicus.

Buprestes Congener.

Buprestes Acuminata.

Buprestes Morio.

Note. The above mentioned insects are contained in Paykull's *Fauna Succica*, where the description may be compared.

The following are to be found in the work of Fabricius:

Elater Trifinis.

Elater Melancholicus.

Elater Metallicus: a new species.

Elater Riparius.

Leptura Ruficollis e Finlandia, vel *L. Thoracica*.

Leptura Strigilata.

Leptura

Leptura Interrogationis : also Var. duodecim maculata.

Leptura Smaragdula.

Leptura Marginata.

Leptura Lamed : also found in the other provinces of Sweden.

Leptura Sexmaculata.

Rhinomacer Attelaboides.

Curculio Arcticus.

Curculio Pineti.

Curculio Æthiops.

Staphylinus Alpinus.

Papilio Embla,

Papilio Gefion,

Papilio Horna,

Papilio Hilda,

Papilio Frigga,

Papilio Freya,

Papilio Pales : this is also found in Germany.

Bombyx Lunigera,

Bombyx Quenzeli,

Bombyx Morio : quite black, with pellucid wings.

Bombyx Lapponica ; Thunberg.

Noctua Divergens, which, according to d'Antic, is likewise found upon the Pyrenees ; but this may be a different species.

Noctua Heliophila,

Noctua Funesta,

Noctua Cincta,

Noctua Cordigera.

} See the Stockholm Transactions of the
year 1791.

} See the Copenhagen Transactions.

Phryganea Phalaenoides.

Tenthredo Lucorum.

Tenthredo Fasciata.

Tenthredo Vitellinae.

Sirex Gigas, Sirex Camelus: both species are also found more to the southward.

Apis Alpina,

Apis Arctica,

Apis Lapponica,

Apis Equestris, &c.

Cestrus Tarandi,

Cestrus Nasalis.

Tabanus Tarandinus.

Culex Pipiens.

Culex Pulicaris.

Culex Reptans.

Empis Borealis.

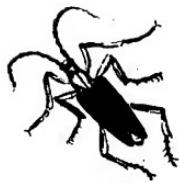
Oniscus Pfora.

Oniscus Entomon.

} The air swarms with them, when the weather is fine.
} On the coast on Norway.

Note. There are some species of *Geometra* and *Tinea* in Lapland; but I do not know their names.

I shall now add the essential characters of the insects exhibited upon the annexed plates, as they are described by that acute and diligent naturalist, Dr. Quenzel.



1 *Papilio Emilia*.
2 *D° undata*.

3 *Leptura Spadix*.
4 *Leptura Thoracica*.

5 *Bombyx Lapponica*.
6 *D°*.



1 *Sirex Nigricornis*.
2 *Apis Alpina*.

3 *Apis Lapponica*.
4 *Bombyx Alpina*.

5 *Noctua Alpicola*.
6 *D° underside.*
7 *Apis Arcticæ*.

PLATE I.

1. *Sirex Nigricornis* : niger—abdomine luteo, basi nigro ; pedibus quatuor anterioribus flavescentibus.
2. *Apis Alpina* : nigra—abdomine fulvo, basi nigro.
3. *Apis Lapponica* : flava—capite, fasciâ thoracis mediâ, antennis, pedibusque, nigris ; abdomine basi fulvo, apicc albido.
4. *Bombyx Alpina* : alis superioribus nigris, flavo maculatis ; inferioribus coccineis, basi fasciisque macularibus concatenatis atris.
5. *Noctua Alpicola* : alis superioribus cinereis, fasciis strigisque undulatis obscurioribus ; inferioribus fuscis, lunulâ marginaque albis.
6. *Noctua Alpicola* : underside.
7. *Apis Arctica* : nigra—thorace anticè posticèque fulvo, abdome supra fasciis flavis fulvisque.

PLATE II.

1. *Papilio Emilia* : alis superioribus fuscis, lunulâ mediâ fulvâ ; inferioribus dentatis, supra lutescentibus, nigro-maculatis, infra virescentibus, maculis circiter sedecim rotundis argenteis.
2. *Papilio Emilia* : underside.
3. *Leptura Spadicea* : fusca, obscura, elytris piccis.
4. *Leptura*

4. *Leptura Thoracica* : nigra, thorace sanguineo.
5. *Bombyx Lapponica* : alis omnibus ferrugineis, maculis transversis flavis fuso inclusis.
6. *Ditto*.

PLATE III.

1. *Papilio Sophia* : alis omnibus integris, fusco ferrugineis, anticis supra ocellis tribus, anteriori gemino luteis pupillâ nigrâ ; inferioribus subtus puncto medio albo.
2. *Papilio Sophia* : underside.
3. *Tinea Leucomella* : atra ; capite, thoracis medio, fasciis tribus, basi ciliisque alarum, annulisque pedum, albis.
4. *Dytiscus Alpinus* : flavescens ; thorace maculis, elytrisque striis abbreviatis, maculisque marginalibus nigris.
5. *Silpha Tomentosa* : nigra, obscura ; elytris rugosis ; capite, thoraceque albido, dense tomentosis.
6. *Coccinella Lapponica* : flava ; thoracis medio, elytrorumque futurâ dentatâ, lineâque flexuosa, cum futurâ bis coëunte, nigris.

Note. This species is not described in Paykull's Fauna ; for it is neither the *Coccinella Arctica* of that author, nor his *Hyperborea*, which is represented upon the annexed plate, fig. 7, nor any other. It is therefore wanting in that work.

7. *Coccinella Hyperborea* : coloptris luteis ; fasciis duabus abbreviatis, nigris flavo cinctis ; thorace flavo, nigro maculato.



2



3



8



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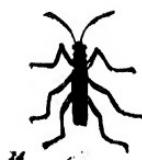
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19

- 1 *Papilio Sophia*. 7 *Coccinella hyperborea*. 13 *Hypulus quadriguttatus*.
2 *D^r underside*. 8 *Dasytes linearis*. 14 *Cantharis Alpina*.
3 *Tinea leuomella*. 9 *Lymexylon Paradoxum*. 15 *D^r Fenni*.
4 *Dyticus Alpinus*. 10 *Gurcilio Arcticus*. 16 *Rhagium Fennicum*.
5 *Silpha tomentosa*. 11 *Leptura Smanigdula*. 17 *Grambyx Fennicus*.
6 *Coccinella Lapponica*. 12 *Curculio Alpinus*. 18 *Scarites Arcticus*.
19 *Elater Costalis*.



8. *Dasytes Linearis* : linearis, virescens.
9. *Lymexylon Paradoxum* : fuscum, capite thoraceque flavescentibus—vix hujus generis.
10. *Curculio Arcticus* : longirostris, femoribus subdentatis, cinereus, fusco striatim punctatus ; punctis thoracis duobus, elytrorumque duobus vel quatuor majoribus, piloso albido.
11. *Leptura Smaragdula* : viridis, pubescens—variat fusca et nigra, pulvere viridi detrito. Similis Lepturæ virenti, at triplo fere minor.
12. *Carabus Alpinus* : thorace rotundato anticè posticèque transverso ; clytris ferrugincis fusco-marginatis, vel totis nigris.
13. *Hypulus Quadriguttatus* : niger, obscurus, clytris flavo quadrimaculatis.
14. *Cantharis Alpina* : mas. fusca, fem. lutescens ; thorace flavescente, posticè unidentato ; maculâ mediâ fusca.
15. *Ditto, Femina.*
16. *Rhagium Fennicum* : thorace subspinoso ; luteum ; capite, clytrorum marginibus, pedibusque, fuscis.
17. *Cerambyx Fennicus* : thorace spinoso ; griseus ; clytris a basi ad medium, fasciâque posticâ, fuscis.
18. *Scarites Arcticus* : niger, subnitens ænco ; pedibus ferrugineis ; thorace globoso.
19. *Elater Costalis* : niger, nitidus ; clytris striatis, convexiusculis, margine exteriore rufescente.

Some

Some of the insects here described, are mentioned in the transactions of the society of natural history at Copenhagen (*Skrivter af Naturhistorie Selskabet i Kjöbenhavn*) ; and several have been named by Dr. Quenzel, who first found them.

Concerning the *testaceous animals*, I have only to remark, that their number is by no means considerable in the North ; and that those which are found there, are like the other productions of nature, neither brilliant in their colour, nor very various in their form. The following are perhaps alone worth noticing :—

Mya Margaritifera, } In the rivers of Lapland.
Mya Pictorum,

Buccinum Glaciale : in the Icy Ocean.

Buccinum Undatum.

SECTION XVI.

Of Lapland Botany.

THE Flora Lapponica, by Linnaeus, is a repository of all those plants which are known in Lapland; but what interests a traveller of curiosity is, to be told which plants most peculiarly appertain to that country, in order that he may be able to concentrate his attention, and carry away with him objects of value, for himself and his botanical friends. To that end I will subjoin a list of those plants, with references where they are described or figured.

The indigenous Plants of Lapland.

Pinguicula Villoso—scapo villoso.* See Flora Lapponica.

Poa Glauca—paniculâ patulâ secundâ, spiculis subtrifloris, flosculis acuminatis basi pubescentibus, foliis subulatis. See Flora Danica.

Campanula uniflora—caule unifloro. Fl. Lapp.

Gentiana purpurca—corollis sexfidis campanulatis verticillatis sessilibus, calycibus truncatis dentatis. Fl. Dan.

* The specific characters are mostly taken from Smith's edition of the Flora Lapponica.

Juncus Biglumis—folio subulato, glumâ biflorâ terminali.—Amœnitates Academicæ Holm.

Juncus Stygius—foliis setaceis depresso-sculis, pedunculis geminis terminalibus, glumis solitariis subbifloris. Smithii Plantarum Icones.

Stellaria Biflora—ramis erectis bifloris. Acta Holmensia.

Stellaria Humifusa—foliis ovatis subsecundis sessilibus, caulis, procumbentibus tetragonis, pedunculis solitariis abbreviatis. Act. Holm.

Stellaria Cerasoides—foliis oblongis, pedunculis subbifloris. Smith Plant. Ic.

Andromeda Cærulea—foliis linearibus obtusis sparsis. Fl. Lapp.

Andromeda Hypnoides—foliis aciformibus confertis. Fl. Lapp.

Andromeda Tetragona—foliis triquetre imbricatis obtusis, ex alis florens. Fl. Lapp.

Saxifraga Cernua—foliis palmatis, caule simplici unifloro. Fl. Lapp.

Saxifraga Cæspitosa—foliis radicalibus aggregatis linearibus integris trifidisque, caule erecto subnudo subbifloro. Fl. Lapp.

Saxifraga Rivularis—foliis radicalibus quinquelobis, florali ovato. Fl. Lapp.

Saxifraga Hirculus—foliis caulinis lancolatis, alternis nudis intermis, caule erecto. Fl. Dan.

Lychnis Apetala—caule simplicissimo unifloro, corolla inclusa—Fl. Lapp.

Rubus Arcticus—caule unifloro, foliis ternatis.—Fl. Lapp. Dan.

Potentilla Nivea—foliis ternatis incisis subtus tomentosis, caule ascendente.—Fl. Lapp. Dan.

Ranunculus Lapponicus—caule unifolio & unifloro, foliis tripartitis.—Fl. Lapp.

Ranunculus Nivalis—caule unifloro, foliis radicalibus palmatis, caulinis multipartitis sessilibus.—Fl. Lapp.

*Ranunculus Pygmaeus.**

Pedicularis Lapponica—caule simplici, foliis lanceolatis semipinnatis ferratis acutis.—Fl. Lapp.

Pedicularis Sceptrum Carolinum—flore aureo magno, rictu sanguineo.—Fl. Lapp. Dan.

Pedicularis Hirsvita—caule simplici, calycibus villosis, foliis linearibus dentatis crenatis.—Fl. Lapp.

Draba Alpina—scapo nudo simplici, foliis lanceolatis integerrimis. Fl. Dan.

Draba Hirta—scapo unifolio, foliis subhirsutis, siliculis obliquis pedicellatis.—Fl. Dan.

Draba Nivalis—foliis lanceolatis integerrimis subpubescentibus ciliatis, scapo unifolio decumbente, petalis retusis.†—
Nova Acta Societ. Upsal.

Gnaphalium Alpinum—caule simplicissimo, capitulo terminato, floribus oblongis.—Fl. Lapp. Dan.

* This species is not to be found in the Flora Lapponica, nor in Widenow's edition of the System. Veget.

† This description is taken from Widenow.

Cypripedium Bulbosum—folio subrotundo.—Fl. Lapp. Smith. Pl. Icon.

Carex Capitata—spicâ simplici androgynâ ovatâ: superne masculâ, capsulis imbricato-patulis.—Fl. Dan.

Salix Phyllicifolia—foliis serratis glabris lanceolatis, crenis undulatis.—Fl. Lapp. Dan.

Salix Tenuifolia—foliis serratis glabris verticaliter ovatis.—Fl. Lapp. Dan.

Salix Foliolosa—foliis integris glabris ovatis confertis pellucidis.—Fl. Dan.

Salix Arbuscula—foliis subscerratis glabris lanceolatis utrimque acutis.—Fl. Lapp. Dan.

Salix Lanata—foliis integris utrimque lanatis subrotundis acutis.
Fl. Lapp. Dan.

Splachnum Luteum—umbraculo orbiculari plano.—Hedwig. Musci.
Amœn. Acad.

Splachnum Rubrum—umbraculo orbiculari hemisphærico.

Splachnum Mnioides—subacaule, receptaculo oblongo.

Splachnum Angustatum—caulescens, foliis piliferis, pedunculo brevissimo.

Splachnum Sphæricum—receptaculo globoso.

Lichen Arcticus—foliis planis subrotundis lobatis obtusis, calyce plano ovali, lacinulæ propriæ adnato, niveus.—Fl. Lapp.

Lichen Nivalis—niveus finibus dædalis laciniatus, ramis erectis, calyce orbiculato.—Fl. Lapp.

Lichen

Lichen Probofcidens—foliaceus, umbilicatus, peltis turbinatis, truncatis, perforatis.

The berry of the *Rubus Arcticus*, when sufficiently ripened, is superior in fragrance and flavour to the strawberry and raspberry, and to all fruit of the same kind, even what we have in Italy. A small plateful would scent an apartment with a more exquisite sweetnes than any perfume I know of. It is singular that so delicious a production should be found in the North. They preserve it in Sweden, and it makes one of the most delicate sweet-meats. Linnæus speaks of this fruit in high terms of praise, and says, that it often refreshed him in his travels through Lapland, when he was overwhelmed with fatigue.

The *Rubus chamænorus* is also used for preserves. It grows plentifully in Lapland, especially in marshy situations. The berry of this plant is yellowish, and nearly of the same shape as the raspberry, but larger in size, and more insipid in taste. We however thought it delicious when we found it in our walks, through the bogs of Lapland.

I am of opinion that the *Diapensia Lapponica*, and the *Azalea procumbens*, should be reckoned among the indigenous plants, properly so called. I have found both in flower on the top of very high mountains, where all other vegetation seemed to cease, and nothing was to be seen besides the *Lichen rangiferinus*.

The *Arbutus alpina*, and *Tussilago frigida*, begin to put out their buds in spite of the snow, and before it is quite melted; and often

the flowers are even produced during the snow. The leaves of the *tuffilago*, however, never come out till about a fortnight after the snow is gone.

The *Andromeda cærulea* adorns the bogs of Lapland. I found some entirely white, and gathered several specimens of them.

The willows are numerous in Lapland, but it is rather difficult to know them, as in many the time of the flower and that of the leaves is different. They are a useful production for the economy of nature, particularly in that country: they furnish the birds with good materials for building their nests, by means of the cottony substance they afford: the insects prefer them to other trees, and by their long and winding roots, they keep the banks of brooks and rivers together, which would otherwise crumble to pieces. The Laplanders make cords of the roots of the willow, which they use in their fisheries.

The quickness of the vegetation in Lapland is a thing of which we have no conception in other parts of Europe. The whole is accomplished in the space of two months; and to give the reader a more accurate idea of it, I will mention as an example, that a tobacco plant at Enontekis generally increases more than an inch in circumference during the interval of twenty-four hours.

I remarked in my travels what trees extended farthest to the north, and from this I abstracted a kind of rule for the latitude in which I found myself. For instance, from Torneå as far as Ketkemando, you meet with firs, pines, and birches, promiscuously: but beyond Ketkemando the firs disappear, and you only

see pines and birches. From Kautokeino as far as the mountains you lose sight of the pines, and the birches alone remain. At Alten you again see a few pines; but from Alten to the North Cape, you perceive nothing but birches, and these become scarcer the nearer you approach the North Cape:

Rara, nec hæc felix in apertis eminet arvis

Arbos—

SECTION XVII.

Of Minerals.

BARON Hermelin, who has published maps of Sweden, Finland, and Lapland, which we have noticed before, is at present engaged in a work on the Lapland minerals; and we may expect something very satisfactory from the labours of a person so well versed in that science, and so accurate and attentive in his researches. Lapland abounds in minerals of all kinds: but it is not easy for a traveller, who is but superficially acquainted with the subject, and who is hurried by the shortness of his time, to communicate as much information as the reader of his work may perhaps be led to look for. I collected in that remote country some stones, or minerals; but soon found them too cumbersome, as we were frequently obliged to travel on foot, and have our baggage carried by men.

When I returned to Stockholm, I laid the specimens I had kept before Mr. Hyelm, who has the care of the collection of minerals at that place, and is inspector of the mint; and he showed me a great number of minerals brought from the same country by different travellers, and chiefly those whom Baron Hermelin

had employed to draw his maps: for he always chose such men as were acquainted with mineralogy, that they might likewise be useful to him in that science, which is the principal object of his attention.

Mr. Hyelm not only had the goodness to favour me with many specimens, of which he had duplicates, but even condescended to write out for me a systematic list of all the Lapland minerals* contained in the collection alluded to, which are arranged according to the different parts of the country from whence they were obtained. This list I will here subjoin, being persuaded it will interest the lovers of this branch of natural history.

* This list, as will be seen, is not confined to Lapland, but takes in some provinces in the neighbourhood, belonging to Sweden and Finland. This deviation from the strict limits of Lapland will probably be pardoned, as it brings additional information, and at the same time refers to countries which have equally been the subject of the foregoing work.

The names of the minerals in the original list were given in Swedish, and sometimes explained by the French. These we have attempted to render into the language familiar to English mineralogists: in doing which we have chiefly followed the works of Kirwan and Cronstedt, and adopted the technical terms used by these writers. To avoid the possibility of a mistake, the Swedish words are added in a parenthesis to most species that are mentioned, and sometimes also the French, German, and Latin appellations. Where any doubt remained; the sign of a query (?) has been put: so that it is hoped the list will appear pretty accurate.

LIST OF MINERALS.

I. MINERALS OF JEMTLAND IN SWEDEN.

1. Stones.

CALCAREOUS GENUS. *Calcareous Spar* (Swed. Kalkspat; French, Spath calcaire) white and red, of different kinds of crystallization. *Limestone* (Sw. Kalksten). *Marble*, striated and of various colours. *Stalactites* (Sw. Dröppsten). *Swinestone* (Sw. Orsten) crystallised and compact. *Marl* (Sw. Mergel) i. e. chalk mixed with clay: it occurs in different forms, and is accordingly distinguished in Sweden by different names, of *Marlekor*, or *Nückelbröd*.

SILICEOUS GENUS. *Mountain or Rock-crystal* (Sw. Bergcrystaller) of different size and colour. *Jasper*. *Shorl* (Sw. Skörl). *Chert* or *Hornstone* (Sw. Hällefinta; Germ. Hornstein; Fr. caillou de roche; Lat. Petrosilex, or Lapis corneus). *Garnet* (Sw. Granater; Fr. Grenat; Lat. Granatus). *Coarse grained Garnet stone*, or *Amorphous Garnet* (Sw. Granatberg; Fr. Roche de Grenat; Germ. Granatstein; Granatus particulis granulatis, figurâ indeterminatâ). *Zeolite*, of several variations.—See the Traveller's Guide

Guide by Mr. Engeström, p. 36, 37. *Siliceous Shistus* (Sw. Kiselkifer).

MURIATIC GENUS. *Shistose Talc?* (Sw. Tallkskifer). *Potstone* (Sw. Tällgsten; Lat. Lapis Ollaris). *Chlorite*. *Steatites* (Sw. Späcksten). *Amiantus*. *Asbestus*, of sundry species.
ARGILLACEOUS GENUS. *Trap* (Sw. & Germ. Trapp). *Mica* (Sw. & Germ. Glimmer) white and black..

AGGREGATED STONES: (Sw. Hällearter). *Norka* or *Murksten*, composed of Mica or Potstone, with Garnet.* *Shistose Mica* (Sw. Glimmerskifer or Hällsten) consisting of Quartz and Mica. *Shistose Clay?* (Sw. Lerkskifer)†.

2. Metals.

COPPER: *Copper Pyrites* (Sw. Koppar kis). *Blue Copper ore* (Sw. Koppar Lazur; Germ. Kupfer Lazur). *Mountain Blue* (Sw. Bergblätt; Germ. Bergblau; Fr. Bleu de montagne). *Mountain Green* (Sw. Berggrönt; Fr. Verd de montagne).

IRON: *Swampy Iron ore* (Sw. Myrmalm; Germ. Sumpferz; Fr. mine de fer limoneuse).

LEAD: *Galena* (Sw. Blyglans; Germ. Bleyglanz; Fr. Galène) of many variations in texture and mixture, even with pyrites of brown iron.

ZINK: *Blende*, which is Zink mineralised by sulphur with iron.

* Kirwan puts quartz, mica, garnet. See Elem. of Mineral. vol. i. p. 343.

† Kirwan classes this under the argillaceous genus. See vol. i. p. 182.

3. *Petrifications.*

Petrified wood.

II. MINERALS OF ANGERMANLAND.

IRON: *Iron ore.*

III. MINERALS OF TORNÉO LAPPMARK.

1. *Stones.*

CALCAREOUS GEN. *Limestone* (Sw. Kalksten). *Calcareous Spar.*

*Scaly Limestone** (Sw. Limsten). *Marl. Fluor Spar.*

SILICEOUS GEN. *Quartz. Mountain or Rock Crystal. Amethyst.*

Garnet. Coarse Garnet. Bafanite or Black Jasper ?† (Sw. Melanit). *Shorl. Zeolite. Hornstone. Jasper. Siliceous Shistus.*

MURIATIC GEN. *Shistose Talc ?* (Sw. Tallkskifer). *Steatites.*

Serpentine. Chlorite. Asbestoid ?‡ (Sw. strålsten). *Asbestus. Amiantus.*

BARYTIC GEN. *Ponderous Spar* (Sw. Tung Spat).

ARGILLACEOUS GEN. different species: *Trap, Hornblende, Mica, Aluminous earth* (Sw. Alunhälltig jord).

AGGREGATES: *Serpentine Rock* (Sw. Ophite). *Norka. Amygdaloid* (Sw. Mandelsten). *Porphyry. Breccias. Sandstones. Shif-*

* See Cronstedt, vol. i. p. 24.

† See Kirwan, vol. i. p. 307.

‡ Ibid. p. 166 and 167.

tose Clay ? (Sw. Ler-skifer). *Shistose Hornblende* ? (Sw. Hornblendeskifer).*

2. Inflammable Substances.

Plumbago (Sw. Blyertz or Graphit). *Native Sulphur*. *Martial Pyrites* or *Common Sulphur Pyrites* (Sw. Swafvel kis; Germ. Sulphur kies).

3. Metals.

COPPER: *Copper Pyrites*. *Blue Copper ore*. *Vitreous Copper ore* (Sw. Kopparglas; Germ. Kupferglas). *Mountain Blue*. *Mountain Green*. *Malachite*. *Dendrites* in *Copper Pyrites*?† *Koppar Brandertz*?‡

IRON: *Iron ore*. *Ferruginous Sand* ? (Sw. Iärn sand). *Micaceous Iron ore* (Sw. Iärn glimmer; Germ. Eisen glimmer). *Hæmatites* or *Bloodstone*. *Sparry Iron ore* (Sw. Stålsten; Germ. Stahlstein or Spathiger Eistenstein of Werner; Fr. mine de fer spatiique). *Iron Ochre*.

ARSENIC: *Arsenical Pyrites* or *Marcasite* (Sw. Arsenikkis; Germ. Arsenikkies).

MOLYBDENA.

GOLD: *Native Gold*, only once found at Svappawara.

* Kirwan arranges the shistose clay, and shistose hornblende, under the argillaceous genus. See vol. i. p. 182, and p. 222.

† This I have not been able to ascertain.—N.

‡ What is meant by this I do not exactly know.—N.

GENERAL REMARKS

4. Petrifications

Are found but seldom.

Note. The principal mines of Torneå Lappmark are, Packtavara, Skanglivara, Raggiovara, Jonuswando, Kirunavara, Luossovara, Wouovara, Kittila, &c.

IV. MINERALS OF UMEO LAPPMARK.

Iron ores of different kinds

V. MINERALS OF PITEO LAPPMARK.

1. Stones.

CALCAREOUS GEN. *Calcareous Spar. Sidero Calcite* ^{2*} (Sw. Brunspat; Fr. Spat calcaire rouge et brun).

SILICEOUS GEN. *Quartz. Rock Crystal. Shorl. Siliceous Shiftus.*

MURIATIC GEN. *Steatites. Asbestus.*

ARGILLACEOUS GEN. *Mica, white and black.*

AGGREGATES: *Norka. Shiftose Mica* (Sw. Glimmerskifer).

2. Inflammable Substances.

Martial Pyrites.

3. Metals.

LEAD: *Galena.*

ZINK: *Blende.*

* Kirwan, vol. i. p. 105.

IRON:

IRON: *Iron Ochre.*

ANTIMONY: *Sulphurated Antimony, or Antimony Pyrites* (Sw. *Antimonii Pyrites*; Fr. *Pyrite Antimoniale*). From the mine of Nasafjäll.

VI. MINERALS OF LUTEO L'APPMARK.

1. Stones.

CALCAREOUS GEN. *Limestone* (Sw. *Kalksten*). *Calcareous Spar.* *Marble.* *Gypsum.* *Lime* (Sw. *Kalk*) *with Garnets.*

SILICEOUS GEN. *Quartz.* *Mountain or Rock Crystal.* *Jasper.* *Chert or Hornstone.* *Shorl.* *Garnet.* *Felspar* (Sw. *Fält-spat*). *Siliceous Shistus* (Sw. *Kiselkifer*).

MURIATIC GEN. *Steatites.*

ARGILLACEOUS GEN. *Trap.* *Clay containing Iron, or Ferruginous Argillite?* (Sw. *Iärnhalltig Lera*).

AGGREGATES: *Serpentine Rock.* *Gneiss* (Sw. *Gneis*). *Shistose Mica.* *Breccias.* *Puddingstone.*

2. Metals.

COPPER: *Copper Pyrites.* *Vitreous Copper ore.* *Mountain Green.* *Malachite.*

LEAD: *Galena* (Sw. *Blyglans*).

ZINK: *Blende.*

IRON: *Iron ores of several kinds, and plentiful.* *Hæmatites or Bloodstone.* *Swampy Iron ore* (Sw. *Myrmalm*).

Note.

GENERAL REMARKS

Note. The principal mines of Lutetia Lappmark are, Kedkevara, Alkavara, Hjertavara, Gellivara, &c.

VII. MINERALS OF KEMI LAPPMARK.

1. Stones.

SILICEOUS GEN. *Hornstone. Garnet. Siliceous Shistus.*

MURIATIC GEN. *Shistose Talc?* (Sw. Tallkskifer) with a black grain. *Amiantus. Steatites. Afbestoid?** (Sw. Strålsten).

ARGILLACEOUS GEN. *Mica. Hornblende. Wacken.*

AGGREGATES: *Sandstones. Hornblende Slate* (Sw. Germ. Hornblendeschifer). *Breccias.*

2. Metals.

COPPER: *Copper Pyrites. Mountain Green.*

LEAD: *Galena.*

IRON: *Sparry Iron ore* (Sw. Stålsten; Germ. Stahlstein). *Iron Ochre.*

VIII. MINERALS OF WESTRO-BOTHNIA.

1. Stones.

ARGILLACEOUS GEN. *Clay containing Iron, or Ferruginous Argillite?* (Sw. Iärnhaltig Lera). *Trap. Hornblende.*

AGGREGATES: *Shistose Mica* (Sw. Glimmer Skifer). *Grunsten or Granitell* (Sw. Grönsten).

* Kirwan, vol. i. p. 166, 167.

2. *Inflammable Substances.*

Plumbago (Sw. and Germ. Graphit).

3. *Metals.*

IRON: *Iron ore.*

IX. MINERALS OF OSTRO-BOTHNIA.

1. *Stones.*

SILICEOUS GEN. *Quartz.* *Garnet.* *Basanite or Black Jasper?*
(Sw. McLanit).

MURIATIC GEN. *Shifsoe Talc* (Sw. Tallkskifer).

ARGILLACEOUS GEN: *Hornblende.*

AGGREGATES: *Grunsten* or *Granitell* (Sw. Grönsten). *Shifsoe Mica.*

2. *Inflammable Substances.*

Plumbago. *Martial Pyrites* (Sw. Swafvelkis).

3. *Metals.*

IRON: *Iron ore.* *Morassy Iron ore?** (Sw. Sjömalm). *Swampy Iron Ore* (Sw. Myrmalm). *Ferruginous Sand?* (Sw. Färnsand).

ARSENIC: *Arsenical Pyrites* or *Marcasite* (Sw. Arsenikkis).

* See Kirwan, vol. ii. p. 153.

GENERAL REMARKS

X. MINERALS OF THE GOVERNMENT OF ULLABORG.

1. Stones.

SILICEOUS GEN. Quartz. Chert or Hornstone. Short.

MURIATIC GEN. Amiantus. Steatites.

ARGILLACEOUS GEN. Marl.

AGGREGATES: Shistose Mica.

2. Inflammable Substances.

Plumbago. Martial Pyrites.

3. Metals.

COPPER: Vitreous Copper Ore. Mountain Green.

XI. MINERALS OF CARELIA.

1. Stones.

CALCAROUS GEN. Crystallised Calcareous Spar or Drusen Spar [†] (Sw. Kalkdrusen). Marble. Marl.

SILICEOUS GEN. Cellular Quartz [‡] (Sw. Quartzdrus). Mountain or Rock Crystal. Zeolite.

MURIATIC GEN. Shistose Talc (Sw. Talk-skifer). Anhydrite [‡]

* See Cronstedt, vol. i. p. 27.

† See Kirwan, vol. i. p. 244.

‡ See Kirwan, vol. i. p. 167 and 168.

(Sw. Tremolit): *Asbestoid*?* (Sw. Strålsten; Germ. Strahlstein).

ARGILLACEOUS GEN. *Aluminous Slate* (Sw. Alunskifer).

AGGREGATES: *Sandstones*.

2. Inflammable Substances.

Plumbago. Martial Pyrites.

3. Metals.

IRON: Ochraceous Iron Ore, found at the bottom of lakes (Sw. Sjömalm).†

XII. MINERALS OF FINLAND, PROPERLY SO CALLED.

1. Stones.

CALCAREOUS GEN. *Limestone. Calcareous Spar. Marble. Sidero Calcite*? (Sw. Brun spät). *Fluor Spar.*

SILICEOUS GEN. *Quartz, red and green. Short. Garnet*, which is supposed to contain tin, but apparently contains *Titanite. Felspar.*

MURIATIC GEN. *Serpentine.*

ARGILLACEOUS GEN. *Argill*, mixed with shells and scales of fishes. *Mica*, convex and glittering. *Trap. Basalt.*

* See Kirwan, p. 166 and 167.

† Is it the mottled iron ore of Kirwan, vol. ii. p. 183?

GENERAL REMARKS.

AGGREGATES: *Sandstone* or *Quadrum Cos?** (Sw. Brynsten; Fr. pierre à aiguifer). *Shistose Mica.*

2. Inflammable Substances.

Plumbago. *Martial Pyrites* or *Common Sulphur Pyrites.*

3. Metals.

COPPER: *Copper Pyrites.*

IRON: *Iron Ore.* *Swampy Iron Ore.*

ARSENIC: *Arsenical Pyrites* or *Marcasite.*

TUNGSTENITE: *Wolfram.*

XIII. MINERALS OF NYLAND, IN FINLAND.

1. Stones.

CALCAREOUS GEN. *Limestone.* *Calcareous Spar.* *Marble.* *Marl.* *Sidero Calcite?* (Sw. Brunspar). *Fluor Spar.*

SILICEOUS GEN. *Quartz*, white, blue, green. *Mountain or Rock Crystal*, blue. *Smoaky Topaz?* (Sw. Röck topas; Germ. Rauch topas). *Short.* *Garnet.* *Basomite* or *Black Jasper?* (Sw. Germ. Melanit). *Coarse Garnet* (Sw. Granatberg). *Zeolite.* *Felspar.*

MURATIC GEN. *Shistose Talc* (Sw. Tallk skifer). *Serpentine.* *Asbestus.* *Asbestoid?* (Sw. Strålsten). *Chlorite.*

* If the novaculite of Kirwan were meant, it should be referred to the argillaceous genus. See vol. i. p. 238.

† See Cronstedt, vol. i. p. 169.

ARGILLACEOUS GEN. *Clay containing Iron, or Ferruginous Argillite?* (Sw. Järnhaltig Lera). *Trap.* Hornblende. Mica. Basalt.

AGGREGATES: *Serpentine Rock* (Sw. Ophit). *Shiftose Mica.* Common roof *Slate?* (Sw. Takskifer; Lat. Schistus tegularis). *Talc with Mica* (Sw. Tallk med Glimmer).

2. Inflammable Substances.

Plumbago. *Martial Pyrites, or Common Sulphur Pyrites* (Sw. Swafvelkis).

3. Metals.

COPPER: *Copper Pyrites.*

IRON: *Iron Ore* of the common sort. *Hæmatites* with Manganese. *Sparry Iron Ore* (Sw. Stålsten; Germ. Stahlstein). *Iron Ochre.* *Native Prussian Blue?* (Sw. Naturlig Berlinerblå).

LEAD: *Galena* (Sw. Blyglans).

ZINC: *Blende.*

ARSENIC: *Arsenical Pyrites, or Marcasite* (Sw. Arsenikkis).

4. Petrifications.

Some are found.

Note. The most remarkable mines in Nyland are those of Lepälä and Orijaufir.

XIV. MINERALS OF THE ISLES OF ALAND.

1. Stones.

CALCAREOUS GEN. *Compact Limestone* (Sw. Tät Kalksten). *Marl*.

SILICEOUS GEN. *Quartz*. *Quartz Crystallized* (Sw. Quarts crystaller). *Mountain or Rock Crystal*. *Felspar*.

ARGILLACEOUS GEN. *Mica*.

2. Metals.

LEAD: *Galena*.

N. B. The above list was made in the year 1800, from the specimens contained in the collection belonging to the college, or the commissioners, of the mines at Stockholm.

SECTION XVIII.

Of the Manufactures of Lapland.

THE Lapland women prepare the skins of the foxes, fawns, otters, and other animals for sale; to which end they strip them of the membranes, and afterwards cure them with fish oil. The sinews taken from the legs of the reindeer are held before the fire, and beaten with wooden hammers; then they are divided into filaments as fine as hair, which the women twist into threads of different thickness. The women likewise ornament the harness of the sledges with tinsel wire, which they draw themselves through a machine made of the skull of the reindeer, provided with holes of different sizes, according to the thickness of the wire they have occasion for. With this wire the women afterwards embroider, and some of them in a very neat manner, not only the harness of the reindeer, but the coats and gloves of the men, as has been already mentioned. The women likewise know how to dye cloth in a yellow colour, which they apply to various ornaments. The blankets the Laplanders use are all woven by the women; and after having served for a time as a covering for their beds, they join them together, as many as are necessary, and convert them into a covering for their tents.

The

The men are very dexterous in making vessels of various capacities, from cups to drink out of, to casks for containing the milk of their rein-deer. The wood they employ for this purpose is from the beech-tree, which is equally beautiful with the maple, when finely polished. From the horns of the rein-deer they manufacture spoons in a neat manner, which they contrive to stain very handsomely in figures not unskillfully designed. Steel they work into knives, to which they fix handles, and ornament them in an elegant manner. We have already spoken of their sledges; besides which they build boats in common with the Norwegians (called *Nordmands*) who inhabit Finmark. Sawing-mills are but lately introduced amongst them, which will contribute greatly to the saving of wood: for whereas with the axe, which they used, they could only split a scantling into two planks, they can now by the help of the saw divide it into several.

SECTION XIX.

Of some particular Customs among the Laplanders.

IN this section the reader will find several things mentioned, which are not touched upon in any other part of this work.

From the time of the ancient Saxons, or the beginning of the twelfth century, the Laplanders were known by the name of *Skrit-Finni*; and from that period to the present have invariably observed their original customs and manners.

It is usual with them, as in the East, never to wait on a superior without a present. If a Laplander has occasion to attend a magistrate, or his clergyman, he brings with him either a cheese, a hare, partridge, sea or river fish, a lamb, some venison, a reindeer's tongue, butter, a quantity of down feathers, or something of the like kind. In return for his present, he never goes back empty, but receives either some tobacco, or a bottle of mead, a keg of beer, some ginger and spices, or, in short, whatever is at hand which may be supposed acceptable. The same custom prevails amongst the Muscovites.

The Laplanders formerly made use of a stick called *priimstave*, by way of almanack, on which were marked the several festivals and principal days of the year.

The midwife's office, throughout Lapland, is generally performed by the husband.

The pastor, or parson of the place, is for the most part god-father to all the children of his parish ; besides which, he does the duties of parish schoolmaster and churchwarden.

When occasion requires the whole family to leave the tent, if there happen to be a child too young to follow the rest, it is put into a chest, and tied with a cord, that it may do itself no mischief by fire, or otherwise : or, if the child be above three years old, it is fastened with a strap by the foot, to a stake driven into the ground in some convenient part of the hut or tent.

When the Laplanders meet, they embrace each other, crying out *buurijf!* which is as much as to say, God save you !

The women shave the heads of their children quite close ; and contrary to the practice of the ladies in all other countries, to use the missionary's expression, *klippe de lyske med en kniv* : which words, though very much approaching the English language, will be perhaps unintelligible, unless I translate them ; for doing which I hope I shall be pardoned by the reader. The meaning of the missionary's expression is, that the good women of Lapland cut their children's lice with a knife and kill them.

As a remedy for pains in the limbs, they put a couple of ligatures about the part, and to the space betwixt them apply a burning firebrand, which they affirm never fails of giving relief.

No horses are employed in West Finmark, the labour everywhere else performed by those useful animals, being there done by men.

men. In this respect the mountain Laplanders are better accommodated, as they use their rein-deer for that purpose. Since agriculture is not attended to, except on some few spots near the river Alten, the Laplanders consume by fire all the dung collected from their cows, sheep, and goats.

Those who by traffic have acquired wealth, have a custom of burying their money in the earth; and this they do so secretly and effectually, that their heirs or successors rarely find it. That they should preserve it thus whilst they live, is not surprizing, because they have no iron chests, or other security against thieves; but that they should conceal it from their posterity is a matter, our missionary confesses, he is not able to account for. He heard of a rich man, who, on having the question put to him on his death-bed, why he had so carefully concealed his money from his family? replied, that he should have occasion for it in the country whither he was going.

In some parts of Finmark the Laplanders make use of the hot bath, sprinkling their heads at the same time with the hot water, through the medium of a bunch of rods.

SECTION XX.

Of Lapland Courtship and Marriages.

IT rarely happens that the natives of Norway intermarry with the Laplanders. The missionary Leem observes, that he never knew an instance of the kind during his long acquaintance with Lapland.

When a Laplander has an inclination to marry a young female of his nation, he communicates his wish to his own family, who then repair in a body to the dwelling of the parents of the girl, taking with them a quantity of brandy to drink upon the occasion, and a slight present for the young woman; for instance, a girdle ornamented with silver, a ring, or something of the like kind. When they come to the door of the hut in which she lives, the principal spokesman enters first, followed by the rest of the kindred, the suitor waiting without until he shall be invited to enter. As soon as they are come in, the orator fills out a bumper of brandy, which he offers to the girl's father, who, if he accepts of it, shews thereby that he approves of the match about to be moyed for. The brandy is handed round, not only

to

to the girl's father and mother, and her friends assembled together, but likewise to the intended bride ; and in the course of this compotation leave is obtained for the young man to forward his suit in his own person. The orator then in a set speech makes a beginning ; and in this stage of the courtship the lover is himself introduced, but takes his seat at a distance from the rest, placing himself near the door. The parents of the girl at length signifying their full consent to the match, the suitor offers the maiden the present he has brought with him, and at the same time promises wedding clothes to her father and mother. Matters being thus happily settled, the company depart. The ceremonial, as it is here put down, is commonly observed, in the whole, or in part, upon these occasions ; indeed, it rarely happens that any of them are omitted. Should it be the case that the parents, after having thus given their consent, depart from their word ; it is an established law amongst the Laplanders, that all the expences incurred must be made good, even to the brandy drunk at the first visit.

As soon as the parties are betrothed, the young man is allowed to visit the intended bride ; and on his way, to enjoy this happiness, he sometimes recreates his mind with singing songs of his own composition in her praise. Love never fails to make poets ; the Laplander's poetry, indeed, furnishes no specimens of elegant effusions ; he paints his love in the thoughts which first present themselves, and cares not much about selection : the words he uses relate to his passion, and that is sufficient for his purpose.

Nor can it in truth be said to be always the case, that he sings upon these occasions ; but whenever he is in the presence of his beloved, though he should forbear to sing, he does not fail to offer to her whatever he thinks will be most acceptable, whether brandy, tobacco, or any thing else. On the day of the nuptials the bride appears dressed in her gala habit ; with this difference, that whereas her head is commonly close covered at other times, upon this occasion her hair is left to flow loose upon her shoulders ; and she wears a bandeau of different coloured stuffs, and sometimes a fillet. The marriage ceremony over, the nuptials are celebrated in a frugal manner and without show. Such of the guests as are invited, and are of sufficient ability to do it, make the bride a present of money, reindeer, or something towards a stock.

In some parts of Lapland it is the custom, a few days after the marriage, for the relations and friends of the newly married couple, to meet and partake of an entertainment, which is but an homely one, as it consists of messes of soup, or broth, with a little roast mutton, and some metheglin ; which being all consumed, the guests afterwards take their departure. Music and dancing are entirely unknown amongst the Laplanders, on these or any other festivities ; nor are they even acquainted with the use of any one musical instrument ; and seem to be totally incapable of learning to sing in tune.

The bridegroom generally remains with the parents of his bride during the space of one year after marriage, and at the expiration

of that period he takes his departure, with a view of settling himself in the world; for this purpose he receives from them what by their circumstances they are enabled to give him towards an establishment, such as a few sheep, a kettle, with some other articles, which, though of but little intrinsic value, are yet essentially necessary in the domestic economy of the Laplander.

SECTION XXI.

Of Sports and Amusements.

THE Laplanders do not observe Christmas as a festival ; nor have they any similar days that they particularly distinguish. They know nothing, or very little, of playing at cards. They exercise themselves in throwing at a mark with a javelin : the prizes in these games, for those who come nearest the mark, are sometimes pieces of money, at other times tobacco, or such like articles. Besides this diversion, they have another with a leathern ball stuffed hard, which is struck in the air, and caught before it falls to the ground.

A certain amusement called *gaase spil*, or the game of fox and geese, is in great request with them. This is played by two parties, on a board marked with square divisions for the purpose ; one of the parties managing thirteen pegs, called geese, about this labyrinth ; and, as may be imagined, in the dexterity of pursuit and escape consists the skill of the players.

Leaping over a stick held in an horizontal position by two Laplanders, is another diversion with which they pass their time. Sometimes two Laplanders, having each of them a stick in his hands, from the end of one a rope being extended to the other, will

will strive to disengage the stick from each other's grasp ; and in this, perhaps, they are assisted on each side by an equal number of the by-standers : this occasions a smart struggle, till at length the rope breaks, or the weakest party gives way, which at once decides the contest ; when the wager, for there generally is one depending on the event, is determined, the prize is assigned to the victor. Another exercise consists in two of them fastening their hands in each other's belt, striving to raise one another from the ground, and thus to give each other a fall. They are besides expert wrestlers ; and these kind of exercises are found necessary to keep their bodies warm, as well as to fill up their intervals of leisure, when they are upon a journey, during the stoppages requisite to be made to give their rein-deer an opportunity of baiting ; for which purpose, as has already been observed, those animals must dig up the snow in quest of moss, as it is not possible to carry forage with them in their sledges.

They are in general excellent marksmen ; and some of them have been known to hit a small object with a bullet fired from their pieces, at a considerable distance ; and that for a number of times repeatedly, without a single failure.

SECTION XXII.

Of the Diseases to which the Laplanders are subject, and the Remedies they use—Of their Funerals.

THE small-pox has at times proved very fatal in Lapland, but has not made its appearance there for many years. In general the Laplanders enjoy the best possible state of health, and excepting the head-ach, and a few slight disorders, may be said to be free from diseases. Inward complaints they pretend to cure by swallowing the blood of the seal and reindeer as warm as possible. The tooth-ach they likewise relieve by drinking the seal's blood: this is but a late remedy, for formerly they knew no other application than a splinter from a tree struck with lightning, with which the diseased tooth was to be touched. It is remarkable that the teeth of the Laplanders are often corroded by worms, and that in a manner unknown to the inhabitants of other climates.

Their method of cure for a disease of the eyes, called the *pin and web*, which is an imperfect stage of a cataract, is singular and curious, and hence is recommended by the missionary to the Danish faculty of physicians: it is effected by the introduction of the *pediculus humanus* (common louse) within the eyelids, which, by

its

its irritation upon the ball of the eye, they believe sufficient to rub off the membrane, and remove the cause of the complaint.

Chilblains may be supposed no unfrequent disorder with the younger part of the Laplanders; and this, as well as spasms and contractions of the limbs, from the severity of the cold, is relieved by an ointment which they extract from the cheese made of reindeer's milk. They heal and soften flesh wounds with the unprepared gum which exudes from the fir-tree. Before they reduce a dislocated or fractured bone, which they do with bandages (amputation of limbs being a practice of which they abhor even the idea), they swallow, in a drink, a piece of silver, or even brass, beaten into a powder; and they believe this potion to be of great efficacy in forwarding the cure.

We have already mentioned the actual cautery made use of by the Laplanders for pains in the hands and feet. This will bring to the recollection of our medical readers the moxa, which has formerly been tried as a remedy in fits of the gout. The moxa is a dry vegetable substance, brought from China and Japan; not unlike the common plant mugwort: it is applied to the skin, and there set on fire. What is used by the Laplanders for this purpose is the *boletus fomentarius*; Lin. Similar applications were in use during the age of Hippocrates, and even employed by the prince of physicians himself.

The sinew of the fore legs of the reindeer is applied as a remedy for sprained ankles, or other strains of the legs, by binding it round the part aggrieved: but a particular restriction is to be

observed in this method of cure, namely, that the buck's sinews only are to be applied to the legs of the female Laplander, and those of the doe to the male.

Their funerals are conducted with little ceremony. The body, slightly wrapped up in a coarse cloth, is borne to the grave, attended by a small convoy of the family and friends of the deceased; for whose entertainment a slight repast is prepared, which affords nothing beyond the common fare, except a small portion of metheglin, which is handed about to the company. It was an ancient custom with the Laplanders to bury those who excelled in shooting with the bow, or with fire-arms, in the ground consecrated to the rites performed in honour of their deities. The sepulchre is no other than an old sledge, which is turned bottom upwards over the spot where the body lies buried. It was likewise usual formerly to raise a heap of stones over the dead body; but that practice is now laid aside, and the sledge is at present the only monument. Another circumstance prevailed amongst the Laplanders before their entire conversion to Christianity, namely, that they placed an axe with a tinder-box by the side of the corpse, if that of a man; and if a woman's, her scissars and needle, supposing these implements might be of use to them in the other world. They likewise put up a quantity of provisions with the dead body, and immediately after the burial of one of the family, they removed their habitation to another spot. For the first three years after the decease of a friend or relation, they were accustomed, from time to time, to dig holes by the side of the grave,

therein to deposit either a small quantity of tobacco, or something that the deceased was fondest of when living. They supposed the felicity of a future state to consist in feasting, smoking tobacco, drinking brandy, and similar amusements ; and they believed that these enjoyments were to be participated in the other world in a higher degree of perfection than they were experienced in this. Such was their idea of the bliss to be found in the life to come, in which they believed their reindeer, as well as the rest of the brute creation, were to be equal partakers.

It is a rule with the Laplanders, on the birth of a child, to assign a female reindeer, with all her future offspring, as a provision when the boy or girl shall be grown up, which he or she becomes entitled to, however the estate may be disposed of at the decease of the parents. By this provision, the child sometimes becomes the owner of a considerable herd.

SECTION XXIII.

Of the Gods and Goddesses which the Laplanders adored before the Introduction of Christianity.

ALTHOUGH the doctrines of christianity have been promulgated since the time of Charlemagne in Norway, the Laplanders cannot be said to be christians of an older date than about a century. Before their *full conversion*, says Mr. Leems, by the missionaries sent amongst them by the crown of Denmark, they were given to practices of the grossest idolatry; and so I have been credibly informed they are still, though they are at pains to conceal them from the missionaries.

There will be little difficulty in believing this, when it is considered how much more easy and natural it is for a people like the Laplanders, with circumscribed conceptions, and in a state of perpetual fluctuation from place to place, to believe in corporeal and limited deities in preference to one spiritual and omnipotent. That train of thinking which inevitably suits itself to man's condition, must render such ignorant people incapable of elevating their contemplation to the heavens, much less are their feeble apprehensions capable of conceiving a pure spirit and perfect intelligence: and further, when we reflect on the impious influence

of custom, and the incurability of prejudices, we shall not be surprised that the Laplanders should prefer the polytheism of their ancestors even to the christian religion.

The deities they worshipped may be divided into four classes. The first were super-celestial: these were named *Radien Atzhie*, and *Radien Kiedde*. Then followed celestial: these were called *Beiwe*, *Ailekes*, and *Ailekes-Olmak*. Of the third class some were sub-celestial, and inhabitants of air. The chief of these was named *Maderaija*: this deity was supposed to keep the region of the air nearest the sun; others that inhabited the region below the sun, were denominated *Maderakka* and *Horagalles*: those nearer the earth were distinguished by the name of *Sarakka* and *Juksa-Akka*. The deities of this class were so placed that they might be at hand to assist mankind when called upon. The gods of the fourth and last class were subterranean, and dwelt beneath the earth. Of those nearest the surface, were *Saiwo*, *Saiwo-Olmak*, *Saiwo-Gitella*, and *Sabme Akko*. Such as occupied the infernal regions, which the Laplanders supposed to be in the very bowels of the earth, were called *Rota*, *Fudno*, *Mubben*, and *Paha Engel*. These infernal deities, Rota and the rest, though considered as evil-disposed towards mankind, were nevertheless worshipped by the people; and possibly for that very reason, in order to deprecate and avert their malice.

Radien Atzhie, of the class of super-celestials, was the chief divinity, or the Jupiter of the Lapland theology; he held dominion over all the rest, his name *Radien* implying sovereign power, and

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the addition of *Atzhie*, signifying a fountain, because he was the spring and source from whence all the rest derived existence and power. *Radien Kiedde* was said, to be his only son: the father created nothing, but transferred the power of creation to the son, to do with it what was proper. These two deities had power over those of the second and third classes, which, being all divinities disposed to do good, were highly reverenced by the Laplanders. Such notions concerning the supreme divinity and his son, have been attributed not unreasonably to their superficial and imperfect acquaintance with the christian doctrine.

Beiwe represented the sun, the fountain of light and heat, through whose bounty their rein-deer were fed. To this deity there could be no offering so acceptable as flax. In allusion to this superstition of their pagan ancestors, a verse is sung by the children in Norway at this day:

Lova, lova lin,
Gud ladt sola skin!

Let sun shine now,
And flax we vow!

Horagalles was the thunder. This was worshipped as a god, because, sensible of its effects, they deprecated the wrath of Horagalles, lest he should kill their rein-deer or themselves.

Ailekes, and *Ailekes-Olmak*, were two deities to whom the Friday and Saturday in every week were dedicated; but in this point

there

there is a difference amongst Laplanders, some of them consecrating the Friday to the *Sarakka* (the Lapland Venus), the Saturday to *Radien*, and the Sunday to *Ailekes*.

Maderakka was the protecting goddess of the Lapland women, who invoked her upon all occasions peculiar to their sex. She was the Lapland *Lucina*, and had for her husband *Maderatja*, who procreated all things, having that office consigned to him from *Radien-Kiedde*. *Sarakka* was the daughter of *Maderakka*, equally adored by the Lapland matrons with the goddess her mother; and *Jukf-Akka* was another daughter. She had the care of the children, which were entrusted to her from the moment of their birth.

Saiwo and *Saiwo-Olmak* were the gods of the mountains. These were called upon in cases of difficulty, and answered those who consulted them in dreams: they likewise helped the Laplander on his journeys, and guarded him from precipices or accidents by the way. *Saiwo-Guelle* was the Mercury of the Laplanders: he conducted the souls to the shades below.

The part of the earth where *Jabme-Akko* dwelt, was called *Jabme-Aikko-Abimo*, or the regions of *Jabme-Aikko*, or death. In those regions the souls of the departed, furnished with new bodies in lieu of those lying in the grave, were in possession of every enjoyment and dignity which they held on earth, but in a more exalted degree.

Rota was the Lapland Pluto. After him the infernal regions were named *Rota Abimo*. To these the souls of bad men were

banished, and here they remained without those hopes held out to the sojourners in the *Jabme-Abimo*, just mentioned, of one day enjoying the sight of *Radien*, and dwelling with him evermore in the mansions of bliss. To *Rota* the Laplanders made application as their last resort, when their supplications appeared not to have been attended to by the other divinities. They moreover believed that all diseases with which men or beasts were afflicted, originated with *Rota*, and that, as he was equal in power with the other gods, no relief could be expected unless this malignant deity was inclined to become propitious.

Thus we observe among this people, what I believe may be found in every early stage of society, the acknowledgment of several limited and imperfect deities. Little reflection seems necessary to convince us that polytheism must have been the most ancient religion among mankind. What religion so natural to confined and obscure minds, as that which ascribes particular causes for health and sickness, plenty and want, prosperity and adversity? They most easily suppose that storms and tempests, pestilence and famine come from malignant powers; prosperous affairs from the contrary. To them good and ill appear universally intermingled and confounded; happiness and misery, wickedness and benevolence, all advantages attended with disadvantages.

In such a stage of society, no passions but the ordinary affections of human life can operate. We may as well suppose that the Laplanders inhabited houses and palaces before caves and huts, as that they should have had a belief in that perfect Being, who has

has bestowed order on the whole frame of nature, rather than in deities retaining human passions and appetites, together with corporeal limbs and organs. The evident order of the universe, the proper adjustment of all things, the design prevalent throughout the whole, are totally unknown to them, and objects about which they are quite regardless. This general plan, to their limited conceptions, is full of contrariety, and appears to be a constant combat of opposite powers. To-day, prosperity; to-morrow, adversity; naturally beget notions of protection and punishment; of benevolent and malignant deities.

Even when we have found an infant people believing in one supreme God, yet have they not divested themselves of an opinion, that all nature was full of other invisible powers; and the vulgar of all nations have such gross notions of the Deity, suppose him so flexible by prayers and entreaties, attribute to him so much caprice, absurdity, and even enormity, as render him infinitely below what we ascribe to a man of sense and virtue.

One general remark may, I believe, be made of polytheism; that it has little tendency to influence its votaries with apprehensions, terrors, or intolerance. The gloom and darkness which almost incessantly hang over Lapland, has not communicated to the religion of its inhabitants either that moroseness or dejection, which too much pervaded the perversion of our most holy system of divine faith and worship during the dark ages. Though the Laplanders were habituated to sacrifices, yet they appear not to

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have been subject to rigid ceremonies, or severe mortifications; though weakness and ignorance were prevalent, yet we find little fear or melancholy.

Where societies are not operated upon by the terrors of superstition, there seems little probability that their natural religion will be much tinctured with those frightful apprehensions of eternal punishments, which are repugnant to humanity and common sense.

SECTION XXIV.

Of the Sacrifices offered by the Laplanders to their Deities.

WITH respect to the deities, of which the attributes and names are contained in the preceding section, as well as the rites and ceremonies observed in their worship, the missionary Leems remarks, that he found the Laplanders to vary in different parts, and on that account has contented himself with setting down what he was able to ascertain from his own personal observation, or could derive from the best information. Of his communications upon these subjects, we have endeavoured to give our readers a short abstract. The whole may serve to establish a truth, that man unenlightened by the truths of a divine revelation, is led to pay his adoration to sensible objects, either as they promote his happiness or interrupt his quiet. Thus the sun, thunder, mountains, lakes, the changes of the seasons, &c. become deities which he strives to propitiate by such ceremonies as he supposes in the simplicity of his mind are most likely to answer that purpose; which ceremonies, as he is wholly intent upon the end he proposes to himself to attain by means of them, appear to him very serious and important.

Rein-deer, sheep, and now and then a seal, were the animals chiefly

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chiefly offered by the Laplanders to their gods. Libations sometimes were made with milk and whey; and occasionally they also made offerings of cheese.

The ceremonies used by them in the performance of this worship, were manifold and various, and all thought to be indispensably necessary. When they sacrificed an animal, sometimes the whole was offered up; at other times only a particular part. It also sometimes happened, that the animal was slain and the whole eaten by themselves, in which case the bones were made an offering to the deity of the place, and were left on the spot that the deity might clothe them with flesh, and restore life to the victim. Staves were sprinkled with the blood of the victim, and left on the spot; and if the place of sacrifice was near a lake or river, the blood was mingled with its waters.

When they had chanced to take a bear, it was partly dressed and eaten, and the liver reserved and consecrated as a burnt-offering.

To conciliate the favour of their deities for their children, presents were made to the gods of different kinds. Whilst the infant was yet unborn, they sacrificed a sheep or deer; in the moment of its birth a dog was destroyed in honour of the deity, by burying it alive; and when the child was at the breast, some other animal was killed for the same purpose.

Libations of brandy were made to the *lares* or household gods, whose abode was supposed to be under the fire place. The firstlings of a cow, if flowing from the first time of her calving, was offered,

offered, by pouring it on the ground within the part of the tent where their cattle were folded. On any change of habitation, an offering was made of milk to conciliate the favour of the deity who was the guardian of the place.

They also had recourse to sacrifices upon occasion of any epidemic disorder discovering itself among them, or any distemper breaking out amongst their cattle. Such offerings were usually made when they went upon hunting or fishing parties, or on their return from them if successful. Horns, and other parts of the rein-deer are found in places, supposed to have been deposited there by the Laplanders who have experienced good fortune in the chace, as offerings to the deity of the place.

Several mountains and a number of rocks were esteemed by the Laplanders as sacred, and held in great veneration. They are distinguished by the general name of *passe-warck*, which means *holy places*, and were formerly places of sacrifice and religious worship. It is to be observed, that these rocks and mountains were remarkable for the singularity of their shape, height, or figure, and consequently excited ideas of awe and reverence in the minds of a simple uninformed people, inhabiting a country visited but for a short season by the cheerful rays of the sun, and buried during the greatest part of the year in snow, with little other light than what they derived from the pale beams of the moon, or the brighter coruscations of an aurora borealis.

Two of these mountains are known at this day by the appellation of the greater and the lesser *Finne-kirke*, given them by the

inhabitants of Norway ; names apparently derived from the superstitious practices of the ancient inhabitants of the country ; though from the difficulty of ascent these mountains would seem to be inconvenient for the purposes of a place of worship. There could be, therefore, no other inducement for making them the seat of their devotions, than the religious horror which they impressed on the minds of a weak, superstitious people.

The veneration for these *passe-warck* has not yet entirely disappeared : some Laplanders visit them yearly in their best clothes, and though they offer no fresh sacrifices, they are careful to leave the bones of former offerings untouched. On no account will they pitch their tents in the neighbourhood of these sacred spots, lest they should disturb the deities with the cries of their children, or other noises. When they pass them, they conduct themselves with the utmost reverence : they would not attack a fox, a bear, or any other animal, near these places ; and if a woman be in their company, she is under the necessity of turning her head aside, and covering her face with her hands.

The ordinary season with the Laplanders for offering up sacrifices, was about the close of the autumn, when they were killing their fat cattle for the winter's store ; besides these, they showed their devotion upon extraordinary occasions, and as necessity required.

No woman was allowed to have any concern in the preparation or solemnization of these sacrifices ; they were exclusively performed by a privileged class of men amongst the Laplanders, called

called *Noaids*. In this office of sacrificing they discovered great dexterity, and on that account were distinguished by the Danish name of *blodmander*, or men of blood. They knew how to separate and divide the different parts of the animal, according to the nature of the sacrifice, and the deity it was intended for. Upon these occasions they constantly wore a particular habit.

Those acts of worship, occasioning a great reduction of their stock of cattle, often brought the Laplanders to a situation of misery and want: as the mountain Laplanders, when attacked by the small-pox or the measles, with difficulty got over these disorders, owing to the pores of their skins being rendered impervious by the dirt and smoke in which they lived, they made numerous sacrifices of rein-deer during their illness, sometimes to the number of twelve rein-deer to one person. Now these people, observing that the converts to christianity appeared to rid themselves of all complaints, by merely signing themselves with a cross, were easily disposed to adopt that religion. But as the God of the christians seemed to them only to have provided for their happiness hereafter; and was, moreover, too mild and gracious to afflict them with diseases, they still considered it to be their interest, occasionally to continue their sacrifices to the gods of their fore-fathers, in order to relieve themselves from sickness and the evils of this present state; and herein they seem to have resembled the Samaritans mentioned in the New Testament, who worshipped the God of Israel, and the idols of the Gentiles at the same time. This in some measure accounts for the Laplanders being only fully

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converted to Christianity so lately : for it is certain that the truths of this religion had been preached amongst them as early as the middle of the ninth century, there being still extant a rescript of the Emperor Ludovicus Pius, who lived at that time, for this purpose, wherein the Laplanders are expressly mentioned by the name of *Skrit Finni*.

SECTION XXV.

*Of the Magic Art practised by the Laplanders: Runic Drum,
Ganic Flies, Juoige, and Noaad.*

THE magic art is said to have been introduced in the North by Odin, who brought it with him from the East, and instructed the Finni; which people becoming great proficients in the art of directing the agency of spirits, obtained the name in these countries of *Finne-kunſt*, that is to say, the science of the Fins. The early chronicles of Norway record the extraordinary feats of magic performed by their kings Haldan and Gunner; how that the first caused a banquet to vanish from before his guests, and that the last, by his invisible agents, procured such intelligence of the secret practices of his enemies, as to enable him to frustrate all their designs. They make mention likewise of Eric Windus, a king of Sweden, who could change the wind with a turn of his hat; and of Siwald, another Swedish monarch, who had seven sons all equally skilful in the arts of magic.

It is unnecessary to mention the great knowledge which the female sex have attained to in this science: there is scarcely a person who has not heard of Lapland witches. A sorceress produced a number of infernal spirits before Hadin, a king of Nor-

way, and another name Kraka prepared a mess of pottage of such admirable virtue, that it would have rendered his son Rollo wise and eloquent; if, unfortunately for him, it had not been intercepted and eaten up by his younger brother Eric, who thereby obtained the benefit designed for his elder brother, and afterwards got the crown for himself. In short, there would be no end of reciting the various stories which ancient writers have left of the magicians, male as well as female, in past times. Mr. Leems therefore confines his narrative to the present state of the magic art in Lapland.

The visible instrument of magic, as now practised in Lapland, is the *runic drum*; and the invisible agents employed in this are called *ganic flies*. The missionary shews the use made of each of these, and gives some account of the *Noaad*, or regular bred magician, together with the *juoige*, or song of incantation used by him, and the method he takes to restore lost property to its right owner.

The runic drum, which may be considered as a compendium of Lapland paganism, has the appearance of the head of a common drum, the wooden frame of which is hung round with brass rings so close together, that they strike and rattle upon the least touch of the instrument. Upon the skin which is stretched over the drum certain characters are painted, representing the Radian, or Lapland Jupiter, with the rest of the deities, of whom an account is given in a preceding section, besides other mystical figures of animals, &c. to the number of forty-five symbols. On some

drums more have been counted ; the Noaaids, or magicians, not perfectly agreeing in this respect in different parts of Lapland : they, however, all coincide in the principal or leading deities. The runic drums are of the more value as they are of greater antiquity ; and if they can be proved to have been delivered from father to son, in a long line of succeeding magicians, they are considered above all price : they are preserved with great care and secrecy, and are hidden from sight, except at the time they are used. A woman dares not to approach the place where one of these drums lies concealed, much less durst she presume to touch it.

Before a Laplander sets out upon a journey, or undertakes any matter of moment, he consults his drum, which he does in the following manner. He places a ring, which is used for this purpose only, upon the drum, and then striking upon it a smart stroke with a small hammer made from a deer's horn, the ring is shaken or driven over the surface from side to side, which, as it touches certain figures of good or bad omen, he conceives the better or worse opinion of his success in what he is about to undertake. As, for example, if the ring move according to the course of the sun, he pronounces that he shall succeed ; if contrarily to the sun's course, that he shall fail in his enterprize, whatever it be, of hunting, fishing, or the like. In the same manner he judges of every event upon which he is disposed to consult this oracle.

Families in general possess such a drum, to which they refer for advice in the retirement of their habitation, considering it as their guide and director upon common occasions ; but in matters

of greater moment, such as sickness, a mortality amongst the cattle, or the like, they apply to privileged soothsayers or magicians: these are called in the Lapland tongue *Noaids*, and are regularly educated in the art. These men are completely initiated by frequent interviews with the spirits in *Jabme-aimo*; besides which, they pretend to be in possession of runic drums which have descended to them from ancestors famous in remote times for their skill in divination. The Noaid observes much the same method with that already described, except that he makes use of some previous ceremonies with a number of very frightful grimaces and contortions, in which he is helped out by the immoderate quantity he takes of brandy and tobacco during his operation. By the effect of these aids to inspiration, he at length becomes so intoxicated, that he falls into a deep sleep, which the standers by suppose to be a trance. When he awakes he pretends that his soul has been conveyed away to some *passe-warck*, or holy mountain, which he mentions by name, and attempts to reveal his interview and discourse with the deities. At the same time he names a sacrifice which must be offered on a certain day, consisting, for the most part, of a well fed reindeer; and this being complied with, he encourages the hopes that the deity who is concerned will prove favourable. The Noaid's injunction never fails to be obeyed; and if the sacrifice of a valuable reindeer be not succeeded by the goods effects which are hoped for from it, the simple Laplander (like those poor unhappy people who run for a cure from one doctor to another, until they have expended the last farthing of their money)

money) has recourse to another Noaad, and another. Now, as every consultation is followed by a fat sacrifice, at which the glutinous soothsayer presides as butcher and principal guest, it happens that the poor Laplander finds himself suddenly reduced to want, his stock of cattle being wasted in riotous scenes of superstitious infatuation.

The *ganic flies* are evil spirits entirely under the direction of the Noaad, and ready at all times to execute his orders: they have been delivered over to him by the Noaad his father, who received them from his, and so on through a long series of magicians. These ganic flies are invisible to all but the magician, who keeps them shut up in a box until he has occasion for their services.

The *juoige*, or song of incantation, is used by the Noaad whilst in the exercise of his magical function. To say it is sung, is to give an imperfect idea of the magician's manner of delivering it, which he does in the most hideous kind of yelling that can be conceived. It is also frequently employed by those who are not professed magicians; for the juoige is supposed to have the power to drive away the wolf, and is considered as a protection for the herd. Indeed, if the wolf be within hearing when they sing it, it is no wonder that he should be frightened away by the noise. The words of this song are very simple; we here present them to the reader, accompanied with an exact translation:

Kumpi don ednak vahag lek dakkam.

Ik shjat kalka dam packest orrot

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Mutto daft erit daakkaa
 Mailme kiætzjhaj mannat,
 Ia don kalkak dai
 Pazhjatallah, dacheke jetzhja lakai hæwanct.

Accursed wolf! far hence away!
 Make in these woods no longer stay:
 Fly hence! and seek earth's utmost bounds,
 Or perish by the hunter's wounds.

The method taken by the Noaad to recover stolen goods is no more than this. He comes into the tent where he has reason to suspect the thief is to be found, and pouring a quantity of brandy into a dish, which then reflects the features of any person looking into it, he makes a number of grimaces over it, and appears to consider it with very great attention. After some length of time employed in this way, he takes the suspected Laplander aside, charges him with the fact, declares that he saw his face plainly figured to him in the dish, and threatens to let loose a swarm of gantic flies upon him, who shall torment him until he makes restitution. Thus does the magician work upon the fears and apprehensions of the suspected person, who, if he be the real thief, never fails to replace whatever he has stolen with the same secrecy as he took it away.

The egregious folly of believing that certain persons were endowed with supernatural power, and that they were assisted by invisible spirits, was universal soon after the establishment of

Christianity,

Christianity, and began not to be generally discredited till the sixteenth century. In England we even find witchcraft supported by royal authority : by James Ist countenanced by the great Lord Bacon. The belief in spirits, not less absurd, even the vigorous mind of Dr. Johnson was not exempt from. But these ridiculous, mischievous, and cruel delusions, are happily banished almost from the habitations of the most ignorant, and we already begin to wonder at the credulity of our ancestors.

SECTION XXVI.

Of the strong Attachment of the Laplanders to their native Country.

THE missionary Leems, on a review of the state and condition of the Laplanders, acknowledges, that their situation is inexpressibly hard and full of trouble: yet he observes that being enured to this kind of life from their early years, their attachment to their native country is greater than that of nations who live in the enjoyment of every convenience and comfort; in proof of which, he gives an account of a commission which he received in a personal interview from his Danish Majesty, Christian VI. to send a young Laplander to his court at Copenhagen, and the extreme difficulty he found in executing it. This interview being so important a passage in the missionary's own life, he relates it with great circumstantiality. It was an interesting period; for the time of his being presented to his majesty very nearly coincided with that of his taking unto himself a wife.

In the beginning of July 1733, he had gone to Aalsund in the province of Sund-Moeria Aletha-Rubergia: it was just three weeks after his marriage, when he was presented to the king by Admiral Rosenpalm. His majesty, who had received a very favourable account

account of his labours, took down his name in his memorandum book, and gave him a promise of future preferment in the church, which, in December, next year, he faithfully fulfilled, by promoting him, after being ten years a missionary in Lapland, to the rectorship of the vacant parish of Augwaldsnes, in the diocese of Christiansand.

The king, in his progress through Norway, in the summer of 1733, was detained for some time in the harbour of Aalsund by stress of weather. He sent for Mr. Leems, and put a number of questions to him concerning the state of the Laplanders, the commerce of Finmark, the success of the christian mission in those parts, and other matters: to which questions the missionary replied according to the best of his ability and information, with all due reverence to his majesty's person. At last the king gave him a commission to get some young man among the Laplanders, and to send him to Copenhagen to him as soon as possible.

But who, says the missionary, could believe it possible that there should be any one who would reject an offer that promised so desirable and splendid a condition of life? Yet this was really the case. Application was made to numbers of individuals among the Lapland youth to go to court, where they would be kindly received and taken care of by the king—but in vain. At length, however, a young man, called Peter Nicolas Korfnaes, was prevailed on to suffer himself to be taken on board of ship to Copenhagen, though not without very great difficulty. This Nicolas had nothing remarkable to recommend him, either in his stature

or figure. There were several youths of more advantageous appearance whom the missionary wished very much to have sent to court in preference to Nicolas Korsnæs: but they were not to be induced to quit Lapland by any argument or promise. There was particularly one of the bay of Alten, of uncommon stature as well as comeliness for a Laplander, whom the missionary pressed very much to go to the king, and his importunities and promise of the royal protection and favour would, he says, have succeeded, but for the intervention of the young man's mother. This woman, who was then in a state of pregnancy, came to the missionary and told him, that the curse of God, as well as her's, would light on his head, if he should tear from her her dear and only son, and if any accident should happen to her, whose time of delivery drew nigh, in consequence of the grief and sorrow she must suffer from that act of his. The missionary after this desisted from all farther persuasion.

When the young Laplander arrived at Copenhagen, he was treated with all possible attention and kindness, being handsomely dressed, and well entertained; all which things Mr. Leems describes minutely: but in the autumn he was taken ill, and languished till the end of the year, when he died. The missionary does not hesitate to ascribe his death to the sudden change of air and manner of living, and quotes the maxim, that "all sudden changes are dangerous." The body of the youth was interred in a very solemn and honourable manner, and the fine clothes in which he had been attired by his majesty, were sent for some small consolation to his sorrowful parents.

At the same time that Nicolas was sent to Copenhagen, another Lapland boy, called Peter Jonas, who lived as a domestic with Mr. Leems, was induced, by the promise of many good things, and not less, it may be presumed, by the example of the youth who allowed himself to be taken to Copenhagen, to go with Admiral Rosenpalm, with the intention of becoming one of his seamen. As the lad did not want capacity, the admiral had him instructed in writing and arithmetic, and sent him on board a Danish East Indiaman, that he might learn the art of navigation. He made one voyage to India, but died soon after his return to Copenhagen.

SECTION XXVII.

Some Observations relative to the Climate and Natural History of Lapland.

THE materials which I have collected on the subject of Lapland, are so numerous and of so various a nature, that I might have considerably increased the bulk of this work if I had chosen to incorporate in it every thing I possess. But I should perhaps have abused the patience of the reader, if I had extended my remarks any farther than I have already done. I think it, therefore, better to keep back what remains, and to produce it at some future period, if a sufficient degree of approbation encourage me to such an undertaking. I cannot, however, at present take my leave without communicating the following table, as an authentic piece of information, which may afford some light respecting the climate of those northern districts, through which I have carried the reader in the foregoing pages. The place to which it refers is *Utsjöcki*, upon the river *Tana*, in Lappmark, situated under 69 degrees 53 minutes north latitude; and perhaps no observations of the kind have ever been made farther to the northward. This table was given me by Mr. Julin, who had suggested the idea of making similar remarks to the Rev. Mr. Castrein (brother

of the Castrein of Kemi, whom we have mentioned before); and the latter gentleman, being fond of natural history, and acquainted with its principles, was well able to satisfy the curiosity of Mr. Julin.

*Observations made in the Parish of Utsjöcki, in Lappmark, 69° 53'
North Latitude, in the Years 1795 and 1797,
By SAMUEL CASTREIN:
Collected and arranged by J. JULIN, of Uleåborg.*

1. *Meteorological Observations.*

	1795.	1797.
The sun's half disk seen above the horizon	Jan. 21.	Jan. 21.
First rain fell	—	Apr. 30.
The ice disappeared on the river Tana	June 3.	June 5.
The lakes were free from ice	—	June 28
Night-frosts began	—	July 15.
The rivers froze	Oct. 12.	Oct. 18.
The lakes froze	Oct. 20.	Oct. 25.
The ground covered with snow	—	Nov. 3.
The sun under the horizon	Nov. 20.	Nov. 18.

2. *Calendarium Faunæ Utsjokenfis.*

The following birds arrived:	1795.	1797.
Emberiza nivalis	—	Apr. 4.
Falco chrysactos	—	Apr. 4.
		Anas

GENERAL REMARKS

			1795.	1797.
<i>Anas cygnus</i>	—	—	Apr. 11.	Apr. 4.
<i>Motacilla alba</i>	—	—	May 6.	May 9.
<i>Mergus mergansor</i>	—	—	May 6.	May 10.
<i>Anas clangula</i>	—	—	May 6.	May 11.
<i>Corvus cornix</i>	—	—	—	May 18.
<i>Colymbus arcticus</i>	—	—	May 20.	May 24.
<i>Fringilla cælebs</i>	—	—	—	May 25.
<i>Motacilla flava</i>	—	—	May 20.	June 3.
<i>Alca Alce</i>	—	—	May 29.	May 30.
<i>Scolopax glottis</i>	—	—	May 29.	June 4.
<i>Cuculus canorus, fings</i>	—	—	May 30.	June 2.
<i>Sterna hirundo</i>	—	—	June 2.	June 6.
<i>Hirundines</i>	—	—	June 2.	June 6.

3. *Calendarium Floræ Utsjokenfis.*

The following plants flowered :		1795.	1797.
<i>Draba Alpina</i>	—	June 23.	June 17.
<i>Rubus chamæmorus, et arcticus</i>	—	June 24.	—
<i>Arbutus uva ursi, et Alpina</i>	—	June 25.	June 17.
<i>Caltha palustris</i>	{	June 30.	June 28.
<i>Cornus suecicas</i>			
<i>Trollius Europæus</i>	—	July 4.	—
<i>Viola biflora</i>	—	July 6.	—
<i>Astragalus Alpina</i>	—	July 6.	June 29.
			Alsine

CONCERNING LAPLAND.

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1795. 1797.

<i>Alpine media</i>	{	—	—	July 10.	July 9.
<i>Andromeda cærulea</i>					
<i>Pedicularis Lapponicus</i>		—	—	July 10.	—
<i>Vaccinia orpinea Suec.</i>		—	—	July 15.	July 7.
<i>Polygonum viviparum</i>		—	—	July 11.	July 8.
<i>Rumex acetosella, et digynus</i>		—	—	July 11.	July 7.
<i>Diapensia Lapponica</i>		—	—	July 11.	July 10.
<i>Ranunculus acris</i>	{	—	—	July 12.	July 12.
<i>Sedum palustre</i>					
<i>Stellaria graminea</i>	{	—	—	July 14.	July 13.
<i>Leontodon Taraxacum</i>					
<i>Myosotis scorpioides</i>	{	—	—	July 20.	July 17.
<i>Prunus Padus</i>					
<i>Saxifraga stellaris</i>		—	—	{	July 17.
<i>Anthericum calyculatum</i>		—	—		
<i>Lychnis Alpina</i>	{	—	—	July 27.	July 13.
<i>Polemonium cæruleum</i>					
<i>Geranium sylvaticum, et Alpinum</i>		—	—	{	July 20.
<i>Geranium sylvaticum, et pratense</i>		—	—		
<i>Menyanthes trifoliata</i>		—	—	July 29.	July 25.
<i>Paris quadrifolia</i>	{	—	—	July 30.	July 18.
<i>Campanula rotundifolia</i>					
<i>Galium uliginosum, et boreale</i>		—	—	Aug. 6.	Aug. 5.
<i>Sorbus aucuparia</i>		—	—	Aug. 7.	Aug. 16.
<i>Rhinanthus crista galli</i>		—	—		
VOL. II.		T t			Parnassia

GENERAL REMARKS, &c.

1795. 1797.

<i>Parnassia palustris</i>	{	—	Aug. 22.	—
<i>Euphrasia officinalis</i>	}	—		
<i>Leontodon autumnale</i>	—	—	Aug. 22.	Aug. 20.
<i>Erica vulgaris</i>	—	—	Sept. 16.	Sept. 10.
The birch (<i>betula alba</i>) sheds its leaves			Sept. 29.	Sept. 25.

A P P E N D I X.

CONTAINING,

I. *Specimens of Finland and Lapland Music.*

II. *A Diary of the Author's Journey from Stockholm to Uleåborg ;
thence to the NORTH CAPE : and back again.*

Runa of the Finlanders.

1

Nu-ko nu-ko pi-co lin-to

ve-ni ve-ni ves-ter-e-ki.

Andante

2

Nu-ko nu-ko pi-co lin-to

ve-ni ve-ni ves-ter-e-ki.

(a) Variation.

2

(a) Having heard this Melody different ways, I here give the Variations as I heard them.

N.B. I am indebted to Mr Schwenke, Music Master of Hamburgh, for the Bass of all the following Tunes, some of which are very ingeniously and scientifically set.

Variation.

Musical score for Variation 3. The score consists of two staves. The top staff is in treble clef, 2/4 time, and B-flat major. It features eighth-note patterns. The bottom staff is in bass clef, 4/4 time, and B-flat major. It features quarter notes and eighth-note chords.

Musical score for Variation 3. The score consists of two staves. The top staff is in treble clef, 2/4 time, and B-flat major. It features eighth-note patterns. The bottom staff is in bass clef, 4/4 time, and B-flat major. It features quarter notes and eighth-note chords.

Variation.

Musical score for Variation 4. The score consists of two staves. The top staff is in treble clef, 2/4 time, and B-flat major. It features eighth-note patterns. The bottom staff is in bass clef, 5/4 time, and B-flat major. It features quarter notes and eighth-note chords.

Musical score for Variation 4. The score consists of two staves. The top staff is in treble clef, 2/4 time, and B-flat major. It features eighth-note patterns. The bottom staff is in bass clef, 4/4 time, and B-flat major. It features quarter notes and eighth-note chords.

(a)

Allegro Vivace

The musical score consists of three systems of four measures each. The first system starts with a treble clef, a key signature of one flat, and common time. The second system starts with a bass clef, a key signature of one flat, and common time. The third system starts with a bass clef, a key signature of one flat, and common time. Measures 5 and 6 are shown in each system.

(a) This is the tune of a Dance of Finlanders played upon the Harp; in such a limited compass of Notes, it is interesting to see how they can vary their Tunes.

This is the Tune of a Song of a Finnish Peasant Girl,
who sung at our particular request at Uleaborg.

6

Andante

The musical score consists of five staves of music. The top staff is soprano, followed by alto, tenor, bass, and a basso continuo staff with a cello part. The key signature is one flat, indicating F major or E minor. The time signature is common time (indicated by 'C'). The tempo is marked 'Andante'. The music features various note values including eighth and sixteenth notes, with rests and dynamic markings like 'f' (fortissimo) and 'p' (pianissimo). The basso continuo staff includes a bassoon part and a harpsichord-like part indicated by a 'C' with a 'B' below it. The score concludes with a final cadence and a repeat sign with a '1' above it.

Finlanders Dance at the Cottage on the Banks of
the River Leivaniemi, played by a blind Fidler.

A musical score consisting of six staves of music. The first staff is in G major, common time, with a tempo marking 'Allegro'. The subsequent five staves are in D major, common time. The music features various note patterns, including eighth-note pairs and sixteenth-note figures, with some notes having stems pointing in different directions. The score is divided into measures by vertical bar lines.

(a) Finlander's Dance on the Banks of Leivaniemi.



(a) It is to be observed in this Tune, that the whole of the first part, and four Bars of the second, are within the compass of the five Notes of the Harp; but the three last are two Notes out of the compass; the Violin, or the introduction of the Fiddle, inspired this licence. It is a timid step out of their limited circle, and for those who are fond of minute enquiries upon this subject, it may shew how the introduction of a new Instrument, less limited than the first, introduces new ideas, and changes by degrees the character of the ancient Music. The second part has the fault of having an unequal number of Bars (7) which is a licence in the usual mode of composition, but which shews that this rule is not to be so strictly attended to, as not being founded on nature.

Music of the Bear Dance at Kengis.

The musical score consists of three staves of music. The top staff uses a treble clef and a common time signature (indicated by '3'). The tempo is marked 'Andantino'. The middle staff uses a bass clef and a common time signature (indicated by '8'). The bottom staff uses a bass clef and a common time signature (indicated by '8'). The music features eighth-note patterns and rests, with some notes connected by horizontal dashes.

The Laplander's cry at Kautokeino.

The musical score consists of two staves of music. The top staff uses a treble clef and a common time signature (indicated by '8'). The tempo is marked 'manc.'. The bottom staff uses a bass clef and a common time signature (indicated by '8'). The tempo is also marked 'manc.'. The music features eighth-note patterns and rests, with some notes connected by horizontal dashes.

Alten.

(a)

Allegretto Vivace



This is originally a Norwegian Tune, which has been transplanted into Lapland by the different Colonists settled there from Norway. It is called a Halling Dance, which is a favorite Dance in Norway. There is a great deal of originality in this Tune, and the sudden transition in the Minor Key is wild and characteristical.

(a) Alten.

The musical score consists of three horizontal staves. The top staff begins with a treble clef, a key signature of one sharp (G major), and a 2/4 time signature. It contains a melody of eighth and sixteenth notes. The middle staff begins with a bass clef, a key signature of one sharp (D major), and a 2/4 time signature. It provides harmonic support with sustained notes and eighth-note chords. The bottom staff continues the bass line with eighth-note chords. The music is divided into measures by vertical bar lines.

(a) This is another Halling Dance, and serves for the same purpose of dancing; although not so fine as the preceding, it bears a peculiar manner.

(a)

Alten.

The musical score is divided into four systems by brace lines. Each system contains two staves: a treble staff on top and a bass staff on the bottom. The key signature is one sharp (G major). The time signature is 2/4 throughout. The first system begins with a forte dynamic and consists of six measures. The second system begins with a melodic line in the treble staff and consists of six measures. The third system begins with a bassoon solo in the bass staff and consists of six measures. The fourth system concludes with a cadence in the bass staff and consists of three measures.

(a) This Tune has very little originality; and except its having each part of six Bars, instead of eight, which is more common, it might be a tolerable Polonaise. As it stands, the fifth and sixth Bars, which form the Cadence of the first part, are too sudden and unnatural.



How this Tune was transplanted so far North, and in these inhospitable regions, it is impossible to tell. Every body acquainted with Music will see that it is neither wild nor odd enough to be borne beyond the polar Circle. It is regular in its Cadences, easy and natural in its transitions, and might be sung in the Streets of Italy and taken for an Italian Song.



This Tune is a Song, and has a very good effect when sung by many, because it is susceptible of accords and accompaniments. It is so simple that we may think it national, although it wants the characteristic Symphony of wild Music.

A D I A R Y.

*Of the Author's Journey from Stockholm to Uleborg; thence to the
North-Cape: and back again.*

THE following daily account of my journey is chiefly intended for the use of future travellers in the same part of the world. Such information, though of itself uninteresting, I know from experience, is valuable to those that find themselves in similar circumstances. It brings them previously acquainted with the objects they are to encounter, keeps their attention more vigilant, and may lead them to make additional observations, which they would probably pass over, if every thing they met with were totally new, and as such intruded upon their notice. It may likewise serve as a sort of index to the foregoing work, or as a companion to the map.

The distances are given in Swedish miles, of which 10 2-fifths are equal to one degree of the equator; consequently the proportion of a Swedish to an English mile is as 10 2-fifths to sixty-nine; for sixty-nine English miles are reckoned to a degree of the equator: therefore one Swedish mile contains nearly

seven English. The miles of Norway are still larger than those of Sweden, and one is about equal to eight or nine English.

In the column of the expences it may perhaps occur, that they are not so great as might have been imagined from what was said in the first chapter; but the difference of travelling is to be taken into consideration. There we spoke of a gentleman travelling in his own carriage, and in summer; whereas the Diary refers to the winter time, when the cheapest of all conveyances, viz. the sledges, are in use. A Swedish skilling is rather more than an English penny; and forty-eight skillings make a rix-dollar, which is about equal to four shillings and six-pence English. The expences are calculated for a single gentleman who wants two sledges, one for himself, and one for his servant and luggage, with an attendant to each, who is to take back the sledges and horse. Besides this, he must unavoidably have a courier, whom he may send on before him to bespeak horses; for the horses are sometimes brought together from different houses that may be three or four miles distant from one another; and if they were not ordered before hand, a very great loss of time would be occasioned by constantly waiting for them: such an *avant courier* is, in Swedish, called *förbud*. The attendants are in general peasants. It is not absolutely required to pay these people any thing besides the hire of the sledges and horses; but it is customary

to present them with a gratuity, as is done with regard to the postboys and drivers of coaches in England.

When I speak of a night's lodging at the peasants' houses, or common stages, it is to be understood that you are furnished with a bed, consisting of a mattress, blankets, and a cover made of calf or lamb-skins: there are no sheets to be had. Fuel and firing is in great plenty every where.

JOURNEY FROM

Stages between Stockholm and Uleaborg, through Finland.	Swedish miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.*	Expences in Swedish Money.
Stockholm.....		Set off at 7 o'clock in the morning* March 18th.	The weather dark and gloomy. Ther. 8° 9° †	
Eufstad.....	1 $\frac{1}{2}$	.....		R.R.D. SKILL. 3 horses 0 42 2 sledges 0 4 3 men 0 9
Ostby.....	2	.....	A thaw about noon:	3 horses 1 0 2 sledges 0 4 3 men 0 9
Hall.....	1	.....		3 horses 0 24 2 sledges 0 4 3 men 0 9
Killande.....	1 $\frac{1}{2}$	.....		3 horses 0 27 2 sledges 0 4 3 men 0 9
Krakstad.....	1	.....		3 horses 0 24 2 sledges 0 4 3 men 0 9
Swamberga.....	1	.....		3 horses 0 24 2 sledges 0 4 3 men 0 9
Tostinge.....	1 $\frac{1}{2}$	Arrived at midnight; departed at the very beginning of March 19.	About mid-night. 6° 9°	3 horses 0 39 2 sledges 0 4 3 men 0 9

* I shall henceforth express the forenoon by a. m., and the afternoon by p. m.

† N. B. This sign \pm signifies below the freezing point; \mp above it.

LOCAL OBSERVATIONS.

You go out of *Stockholm* by the north gate; pass through *Haga*, cross the lake upon the ice in the middle of the king's gardens. You come very near *Ulriksdal*, a seat of the queen dowager, but leave it on the left.

Eufstad is only a single peasant's house.—The country is varied with little hills, that are here and there covered with wood, and well cultivated; these present in summer some pleasing landscapes.

Oßby is a small hamlet, with about four or five peasants' houses, where the traveller may in some degree be accommodated.—The road from thence is hilly.

Hall. Here you may get a night's lodging, such as it is.

Killande is a hamlet of four or five houses: no accommodation for travellers.

Krakßad, a single peasant's house; no accommodation.

Swämberga, a peasant's house, situated upon the banks of the lake *Jerven*, which is surrounded with a wood of fir-trees: this situation must be pleasant in the summer season.

Fosinge: two or three peasant's houses, not calculated to receive strangers.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Grislehamn.....	4	March 19. Arr. 1 a. m. Dep. 9 a. m.	5° 0 on the sea. 7° 0 Wind S. W.	3 horses 0 18 2 sledges 0 4 3 men 0 9*
Signilskar.....	5	Arr. 5 p. m.....		6 horses 2 24 4 sledges 0 16 6 men 0 24
Ekero.....	2	Arr. 7½ p. m.	3° 0	3 horses 1 0 2 sledges 0 4 3 men 0 9
Frebbbenby.....	1½	Arr. 9 p. m. Departed March 20th 7 a. m.	4° 0	3 horses 0 30 2 sledges 0 4 3 men 0 9
Enkarby.....	1½	.....		3 horses 0 30 2 sledges 0 4 3 men 0 9
Haraldsby.....	1½	.....		3 horses 0 30 2 sledges 0 4 3 men 0 9

* This being so short a stage, two skillings might be enough for each driver; but it is hardly worth while to notice such trifles.

LOCAL OBSERVATIONS.

Griflehamn is the post-house (a brick building) where the passengers that travel this way to go to Finland, either in winter or summer, generally stop: the road lies across the sea. In summer there are always post-boats ready to convey the travellers; and in winter, when the ice is strong enough to bear, sledges and horses are here furnished. It is to be observed, that at this place you are obliged to take double the number of horses to what you had before: there is a telegraph at Griflehamn.

Signilskar is a rock, or small island, the first of the kind you meet in crossing the sea. There is a telegraph, which corresponds with the one at Griflehamn.

Ekerö is another of that cluster of islands, known under the name of *Aland*. This island is of considerable extent; it consists of sixty *hemman*, let to different families. *Hemman* means an estate of land belonging to the crown, and farmed by the peasants: there is a church, fifty windmills, a great quantity of wood and corn.

Frebbensby consists of only two houses; one destined for travellers, and the other inhabited by peasants.

Enkarby; a few houses without any accommodations for passengers. The country is hilly, and consequently the road uneven.

Haraldsby, a small village, situated on an eminence, and conspicuous by some windmills. The way lies close by the castle of Castelholmen, famous for having been the prison of Eric XIV. It is built upon a rock, at the extremity of a neck of land that juts out into the sea.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Skorpas	1 $\frac{1}{4}$	March 20. Arr. noon.	The weather dark and gloomy, yet not foggy : a thaw.	3 horses 0 30 2 sledges 0 4 3 men 0 9
Vergata	1 $\frac{1}{4}$	.....		3 horses 0 18 2 sledges 0 4 3 men 0 9
Kumlinge	3 $\frac{1}{4}$	.....		3 horses 1 30 2 sledges 0 8 3 men 0 12
Brandö	2 $\frac{1}{2}$	.....		3 horses 1 12 2 sledges 0 6 3 men 0 9
Varfala	2 $\frac{1}{2}$	Arrived at midnight.	The weather cleared up, with a frost	3 horses 1 12 2 sledges 0 6 3 men 0 9
		Staid March 21 and 22.	of 14° 0 from 12° to 7° 0	
		Dep. March 23, 9 a. m.	7° 0 9° 0	
Helsing	2	.....		3 horses 1 0 2 sledges 0 4 3 men 0 9
Himois	1 $\frac{1}{2}$	.....		3 horses 0 36 2 sledges 0 4 3 men 0 9
Laitis	1 $\frac{1}{2}$	.....		3 horses 0 30 2 sledges 0 4 3 men 0 9

LOCAL OBSERVATIONS.

Skörpas consists of three or four houses, in which the peasants seem to live very comfortably. There is also a small building for the use of travellers, where they may be lodged and entertained.

Vergata; a single house upon a little island, without accommodation for passengers.

Kemlinga; a single house upon a small island, in which passengers may be accommodated with a lodging.

Brandö, another small island, but without any sort of accommodation for travellers except horses, which may be had of the peasant; but you must proceed as far as *Varsala* to obtain a lodging.

Varsala likewise a small island. There are two rooms in the peasant's house destined for the reception of travellers. The peasants seem to live there pretty well; they can give you potatoes, butter, milk and beer.

Helsing; a peasant's house, with an apartment for strangers. Here the Swedish language begins to cease, and is replaced by the Finnish. Almost the whole of the road goes through pine and fir-woods: the country is flat.

Himois. Only one room for travellers, which being very small, could hold but a few people.

Laitis, a peasant's house, without any accommodation for passengers.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Niemenkyla.....	1 $\frac{1}{2}$	March 23.....	3 horses 0° 27 2 sledges 0 4 3 men 0 9	1 <i>l</i> sd. 8 <i>skl.</i>
Humikala.....	1 $\frac{1}{2}$	.....	3 horses 0 36 2 sledges 0 4 3 men 0 9	
Abo.....	1 $\frac{1}{2}$	Arr. 10 p. m. Dep. March 24, 26, 1 p. m.	8° 0 March 24, 2 sledges 9 a. m. 9° 0 noon 8° 0 midni. 10° 0 March 25, pay at this morn. 11° 0 stage four March 26, skill, more 1 p. m. 5° 0 for the Some snow horses. fell.	3 horses 0 39 2 sledges 0 4 3 men 0 9 N. B. You pay at this stage four skill, more for the horses as usual.
Makyla.....	2	.....	3 Horses 1 12 2 sledges 0 4 3 men 0 9	
Lachto.....	3 $\frac{1}{2}$	.....	3 horses 0 30 2 sledges 0 4 3 men 0 9	

LOCAL OBSERVATIONS.

Niemenkyla. The reader will observe with what nicety the Swedish miles are subdivided. In France, England, and other countries, the traveller's money generally levels the fractions, but it is not so in Sweden. There is but one apartment for passengers in the peasant's house at this place.

Hämeikala. Here one may lodge pretty comfortably. The house affords two bed rooms, and a sitting room. Proceeding from this place it is always necessary to have an interpreter of the Finnish tongue, because the people do not speak Swedish.

Abo is the capital of Finland. There is the castle of Abo-hus, a fine cathedral, a university, a library : it is the residence of an admiral, a governor, and a bishop. A quarter of a mile (Swedish) from the town you pass by the church of St. Mary, which is said to be very ancient, and to have served as the cathedral before the foundation of the city. The government of Abo has allowed the peasants to raise the price of posting, in consequence of some particular duty.

Makyla. No accommodation for passengers. The whole way is by land ; there are neither lakes nor rivers ; and when the road is unfit for the sledges going, travelling here becomes very irksome.

Lachto. No lodging for travellers. We here saw the people use the tops of fir-branches instead of straw, to make litters for the cows and procure manure.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Mustanoja	1 $\frac{1}{4}$	March 26.		3 horses 0 30 2 sledges 0 4 3 men 0 9
Oripaa	1 $\frac{1}{4}$	Arr. 11 p.m. Departed March 27, 9 a.m.	5° 0 11° 0 A clear sky.	3 horses 0 33 2 sledges 0 4 3 men 0 9
Wirtzanoja	1			3 horses 0 24 2 sledges 0 4 3 men 0 9
Sallila-Peltari	1 $\frac{1}{4}$			3 horses 0 30 2 sledges 0 4 3 men 0 9
Mamala	1 $\frac{1}{2}$		About noon 3 inches of snow fell.	3 horses 0 45 2 sledges 0 4 3 men 0 9
Kiviniemi	1 $\frac{1}{2}$			3 horses 0 33 2 sledges 0 4 3 men 0 9
Soinila	1 $\frac{1}{2}$			3 horses 0 27 2 sledges 0 4 3 men 0 9

LOCAL OBSERVATIONS.

Muflanoja. Here is a small separate house for the reception of travellers.

Oripaa. No lodging for strangers. At a little distance from this place is the source of the river Aurajoki. The road is very fine, and goes through the middle of a pine-wood.

Wirtzanoja, a wretched place belonging to the parish of Losmijoki, and the district Biörneborg or Satekunda. The road still proceeds through woods of very old pine-trees.

Sallila-Peltari. One may here get some kind of lodging. The peasants are stout and handsome people. You have to cross the Loima, Pungalaifis, and the Lembou or Ills, all of them small rivers that empty themselves into the river Cumo.

Mamala. Here is a separate small building for travellers.

Kiviniemi. No lodging for strangers. The river Cumo appears very considerable, and the noise of its current is heard under the ice.

Soinila, a small hamlet without any accommodation for travellers. You pass over a wooden bridge about two hundred paces, or four hundred feet long, which is called *Wamasjoki Bro*. The river forms here a sort of cataract, which falls down with a great roaring : in the Finnish language a cataract is called *koiki*. What appears contrary to all rule is, that the bridge is built in the shape of a crescent or half-moon, with the curve turned towards the current.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Heinois.....	1½	March 27. Arr. 10 p.m. Departed March 28, 9 p.m.	The clouds dispersed by the wind. 9° 0 A very clear sky.	3 horses 0 42 2 sledges 0 4 3 men 0 9
Wuorigis or Haga..	1½	.....		3 horses 0 36 2 sledges 0 4 3 men 0 9
Hertuala.....	1½	.....		3 horses 0 30 2 sledges 0 4 3 men 0 9
Yervenkyle.....	1½	Arr. 5 p.m. Staid March 29, 30, 31, Departed April 1, 9 a.m.	9° 0 March 29. A clear sky. morn. 10° 0 noon 8° even. 7° March 30. Snow about noon. Ther. the whole day at 3° 0 March 31. The air dark. Therm. the whole day at 4° 0 April 1, 9 a.m.—7° 0	3 horses 1 0 2 sledges 0 4 3 men 0 9

LOCAL OBSERVATIONS.

Heivois. Here is a room for passengers, with three beds in it: the way lies across the ice.

Wuoriais. The house at this place is unfit for the reception of travellers: it is one of those Finlandish cottages which, if I am not mistaken, are called *putcha*. They have no chimney, but the smoke goes out of the windows, which are without glass, and remain always open, even in the severest weather. Wood is not scarce in this country.

Hertuala. No lodging for travellers. A quarter of a Swedish mile to the right, before you come to Yervenkyle, you will see the road that leads to the cascade of Kyro.

Yervenkyle. Two or three peasants' houses, with a little cottage to receive strangers: the latter only consists of one room, with two beds and a stove. The peasant of this cottage is a good honest creature, and seems to live with tolerable ease. Yervenkyle is not the straightest way to go to Wasa, but we made this circuit, in order to see the cascade of Kyro.

JOURNEY FROM

Stages between Stockholm and Uleaborg, through Finland.	Swedish miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.	
Kiala.....	2	April 1.....	3 horses 2 sledges 3 men	Rix-d. skil. 1 0 0 4 0 9	
Paskana-kaisi.....	2½	.....	3 horses 2 sledges 3 men	1 3 0 4 0 9
Kuifwais.....	2½	.....	3 horses 2 sledges 3 men	1 15 0 4 0 9
Koskua.....	2½	.....	3 horses 2 sledges 3 men	1 12 0 4 0 9
Lambä.....	2	Arr. 11 p.m. Departed April 2, 6 a. m.	10° 9 15° 9	3 horses 2 sledges 3 men	1 0 0 4 0 9
Reinicka.....	2½		3 horses 2 sledges 3 men	1 18 0 4 0 9

LOCAL OBSERVATIONS.

Kiala: a house in the famous wood of Kyro. The accommodations are pretty good: the road is constantly among the woods: we saw foxes.

Paskana-kaifi. Strangers may get a lodging here. The road goes through the wood, and for the last quarter of a mile (Swed.) over the ice of a small lake.

Kuifwais. Here is some sort of lodging for strangers. The road constantly among the woods, where you now and then will meet with a little lake. The peasants do not follow the main road in these woods, but keep the straightest line possible; and in order not to miss their way, the trees that you ought to pass have been marked with a hatchet. This is the same mode of travelling as is adopted in the woods of America.

Kykuia. No lodging for strangers. We passed a little river, the ice of which cracked under our sledges, and threatened to break every moment.

Lambä, pronounced *Lambé*. There is a great room with three beds for travellers.

Reinicka. In this house they gave us a kind of very coarse cheese, which they roast by the fire in the same manner as they toast the cheese in England. The people are of a very hospitable disposition. We proceeded for two miles over the ice, which in some places is so clear and transparent, that we could see the stones and fishes at the bottom.

JOURNEY FROM

Stages between Stockholm and Uleaborg though Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Talvizie.....	2½	April 2.	A thaw about noon. 3 horses 2 sledges 3 men	Rix-d. Skil. 1 3 0 4 0 9
Tuokola.....	2½	.....	3 horses 2 sledges 3 men	1 6 0 4 0 9
Gumfila.....	1½	.....	3 horses 2 sledges 3 men	0 36 0 4 0 9
Sillampe.....	1½	Arr. 10 p.m. Staid April 3, April 3 and 4 9 a. m. 3° 0 At noon a thaw. April 4, morn. 6° 0 noon 4° 0 even. 4° 0 8° 0	3 horses 2 sledges 3 men	0 42 0 4 0 9
Tooby.....	1½	.....	Departed April 5, 8 a. m.	3 horses 2 sledges 3 men
Wasa.....	¾	Arr. 10 a. m.	A thaw about noon, as the day before. Towards midnight 4° 0 6, morn. 3° 0 noon thaw; therm. 4° 0 Departed April 7, 7 a. m.	3 horses 2 sledges 3 men
			midn. 1° 0 2° 0	0 18 0 4 0 9

LOCAL OBSERVATIONS.

Talvizio. Here is a room for travellers. As there were no young men in the house, a young girl followed the sledge in the capacity of driver. This is a very common thing in Finland, that girls attend the travellers, in order to take back the horses.

Tuokola. No lodging. There are two houses on the left bank of a river, on which we travel as far as Gumsila, and which being open in some places threatened us with danger.

Gumsila. I perceived no place where a stranger might be lodged. As our journey was to continue on the same river which would present the same dangers, two guides offered themselves to shew us the safest route.

Sillampe: good accommodation for passengers. There lived a widow in easy circumstances, as it appeared, who was provided with every thing necessary for travellers. Here is a small church.

Tooby. An apartment for strangers. The country is flat. Meadows of considerable extent, which having been flooded, afforded a pleasant passage for our sledges over the ice.

Wasa is the capital of the government of the same name. There is a sea-port, a tribunal of justice, a president, and a governor.

JOURNEY FROM

Stages between Stockholm and Uleaborg, through Finland.	Swedish miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Kosky.....	1½	April 7.		3 horses 0 30 2 sledges 0 4 3 men 0 9
Manmo.....	2	.....	About noon 3° 0	3 horses 1 0 2 sledges 0 4 3 men 0 9
Onganger.....	1½	.....		3 horses 0 30 2 sledges 0 4 3 men 0 9
Mono.....	1½	.....		3 horses 0 36 2 sledges 0 4 3 men 0 9
Skrivars	1	.....		3 horses 0 24 2 sledges 0 4 3 men 0 9
Fyrkarness.....	2½	Travelled all night.	A thaw.	3 horses 1 0 2 sledges 0 4 3 men 0 9

LOCAL OBSERVATIONS.

Koiky. This is, properly speaking, not a place for changing horses. We however took this route at the advice of the governor of Wasa, who directed the peasants to keep horses in readiness for us, in order that, by going on the river, we might get upon the ice of the sea, and thus travel more easily with our sledges; but I cannot recommend this road. The peasants are not accustomed to this employment, and do not know how to act, so that one is exposed to inconvenience.

We came by the common post-road to *Manmo*; but the two last miles were over land, and the ways extremely bad. I have reason to suspect that the peasants did not follow the orders of the governor, and the route he had traced out for us. The whole of the way from *Manmo* to *Onganger* was over the ice of the sea.

Onganger. No place for passengers to lodge at. We proceeded constantly over the Frozen Sea, traversing the bays, and passing between islands or rocks, that rose above the surface of the ice. On the left the high sea is seen, on the right the coast, which is very flat, and presents at some distance pine woods to view.

Mono is a peasant's house, without any accommodation for travellers. One-third of the way goes over the ice of the sea, two-thirds over land.

Skrivars. I saw no place for the reception of passengers. We went continually on the ice of the sea, where we saw some boats frozen in, near to which we passed with our sledges.

Fyrkarness. No place to accommodate strangers. This is likewise a deviation from the main road, which we preferred, for the benefit of the ice by sea, as the passage over land was very bad. We were compelled to travel all night for want of lodging, and fearing the thaw, which began to diminish the ice.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Fagernefs.....	2	April 7.....	3 horses 2 sledges 3 men	1 0 0 4 0 9
Kurofolk.....	1	.....	3 horses 2 sledges 3 men	0 24 0 4 0 9
Gamla Carleby.....	2	Arrived April 8, 6 a.m. Departed at noon.	1° 0 2° 0	3 horses 2 sledges 3 men
Ojanala.....	3	.....	3 horses 2 sledges 3 men	1 24 0 6 0 9
Hignala.....	2	Arr. 7 p. m. Departed April 9, 9 a. m.	Thaw with snow. 2° 0	3 horses 2 sledges 3 men
Rocola.....	.....	.....	.....	.....
Kilajoki.....	31	.....	About noon 4° 0, and a great thaw.	3 horses 2 sledges 3 men
				1 36 0 6 0 9

LOCAL OBSERVATIONS.

Fagernef. This place is celebrated for good horses, and we had indeed very excellent ones. There is no lodging for strangers.

Kurfolk. Some fishermen's huts; no accommodation for travellers. The peasants here, as in other parts of Finland and Sweden, sleep in beds three stories high, one over the other.

Gamla Carleby: a small town in the government of Wasa. In the post-house, where you change horses, there are some very decent apartments for travellers.

Ojmala, a peasant's house, in which no passengers can be received. You should always take the precaution not to suffer yourself to be conducted over land when the passage for sledges is bad; but desire and even oblige your drivers to keep on the ice, though the way should be rather longer.

Hignalä. Lodgings for travellers. You ought not to risk travelling in the night under this latitude in the winter season, because you cannot well distinguish the road on the ice, and may deviate from your direction.

We should have gone by *Rocola*; but being on the ice of the sea, we must have fetched a circuit to the right, for the sake of changing horses, and come back the same way: we therefore engaged the horses we had to bring us straightways to *Kalajoki*.

Kalajoki. No dwelling for travellers. The road proceeds over the ice of the sea, which is broken by the rocks underneath the surface, when it sinks or lowers itself so as to touch them: this has a very pretty appearance.

JOURNEY FROM

Stages between Stockholm and Uleaborg through Finland.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.	
Yowala.....	1 $\frac{1}{4}$	April 9,	3 horses 2 sledges 3 men	0 27 0 4 0 9	
Kevialuoto.....	1 $\frac{4}{3}$	.....	3 horses 2 sledges 3 men	0 30 0 4 0 9
Luoto.....	1	Arr. 1 p. m. April 10, Departed 7 a. m.	A thaw. 1° 0	3 horses 2 sledges 3 men	0 24 0 4 0 9
Siniluoto.....	2	.....	3 horses 2 sledges 3 men	1 0 0 4 0 9
Brakestad.....	1	About noon a great thaw; 6° 0	3 horses 2 sledges 3 men	0 24 0 4 0 0
Laffila.....	4 $\frac{1}{2}$	.....	3 horses 2 sledges 3 men	0 17 0 4 0 9
Gertuala.....	1 $\frac{7}{8}$	.....	3 horses 2 sledges 3 men	0 34 0 4 0 9
Karicanda.....	3 $\frac{1}{2}$	Arr. 9 p. m. April 11, Departed 7 a. m.	A continued thaw. 1° 0	3 horses 2 sledges 3 men	0 25 0 4 0 9
ULEABORG.....	4 $\frac{1}{2}$	Arr. at noon.	The sun bid by the clouds	3 horses 2 sledges 3 men	2 36 0 8 0 16

LOCAL OBSERVATIONS.

Yowala. Here you find a room with two beds, at the service of travellers. The whole of this coast presents nothing interesting to the painter: the country is flat.

Kevaluoto. No reception for travellers. We travelled continually on the ice, though the passage was far from being pleasant, on account of the rocks by which the ice was broken, and the road made very uneven and rough.

Luoto. Here are two or three rooms to accommodate travellers. You may even get coffee at this place.

Siniluoto. The post-house being on the shore, we had no occasion to drive up to it, but the horses, which were ready, were sent down to us: they were put to on the ice, and we pursued our journey. I do not know whether there are any lodgings for passengers.

Brakesföd is a small town, which has a sea-port, and carries on some commerce. There is an indifferent sort of inn there; and the town does not appear to advantage upon entering it.

Laffila. No lodging for travellers. The peasants seem to be poor.

Gertuala. No accommodation for strangers. There is a church, and the parson lives in a very comfortable house. He is said to be one of the richest clergymen in Finland.

Karicanda. Passengers find a lodging here: there is a parlour and two bed-rooms.

Uleaborg. The capital of Ostrobothnia. It is the residence of a governor and some inferior magistrates.

JOURNEY FROM

Stages between Uleaborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Uleaborg.....		Set off about midnight. June 9.	N. B. It being summer, a cart or carriage is re- quired instead of a sledge; as far as Ofver Tornea, where horses are no longer made use of.	
Tukuri.....	1½			3 horses 0 30 2 carts 0 4 3 men 0 9
Kaupila.....	1½	June 10. Arr. 2 a. m.		3 horses 0 24 2 carts 0 4 3 men 0 9
Vejola.....	1½			3 horses 0 30 2 carts 0 4 3 men 0 9
Saffi.....	2			3 horses 1 0 2 carts 0 4 3 men 0 9
Tesfile.....	1½			3 horses 0 42 2 carts 0 9 3 men 0 9
Hutta.....	1½	Arr. 8 a. m. June 11. Departed 8 a. m.		3 horses 0 27 2 carts 0 4 3 men 0 9

LOCAL OBSERVATIONS.

Leaving Uleaborg, you have to cross the river in a ferry-boat, which will hold horses and carriage. The ferry is at the mouth of the river, where it is two miles and about 100 yards broad. You coast along two islands, Piti Saari and Hiela Saari, and leave them on the left. On these islands they boil the tar, which constitutes the chief article of the exports of Uleaborg.

Tukuri. Some arrangement for the reception of travellers. Here is the river Aukipudas to pass in a ferry. It is about four hundred and fifty yards across. The roads excellent; you see every where great woods.

Kaupila. A room for passengers. The country almost quite flat. A great deal of pine and fir-wood: birches very common.

The village of *Vejala* is situated on one side, and the small town of *Lo* on the other side of the river *Lo*, which is six hundred and twenty-five yards broad. There is much salmon caught in this neighbourhood.

Saffi. No dwelling for travellers. A girl of twenty years of age attended us in the quality of driver. Here is another ferry over the river *Kuivaniemi* which you have to pass: it is about one hundred and fifty yards across.

Tessile. A room for passengers.

Hutta. A set of peasant's houses, where a traveller may be accommodated.

JOURNEY FROM

Stages between Uleborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Eryast.....	1½	June 11.	3 horses 2 carts 3 men	Rix-d. skdl. 0 24 0 4 0 9
Rautiola.....	½	.....	3 horses 2 carts 3 men	0 12 0 2 0 6
Kemi.....	.....	Arr. 2 p. m. Staid June 14. Departed June 15.	.....	.....
Leivaniemi.....	1½	.....	3 horses 2 carts 3 men	0 36 0 4 0 9
Tornca.....	1	June 15. Arr. at noon. Staid June 14, 15, 16. Departed June 17.	3 horses 2 carts 3 men	0 24 0 4 0 9
Kukko.....	1	.....	3 horses 2 carts 3 men	0 24 0 4 0 9
Frankila.....	1½	.....	3 horses 2 carts 3 men	0 36 0 4 0 9

LOCAL OBSERVATIONS.

Ervast. A room for travellers.

Rautiola is a small village on the left bank of the Kemi, which is a considerable river, and flows with great rapidity.

Kemi is also the name of the parish, where the church and the rector's house are, on the right bank of the river Kemi. The road hilly : you pass a little bridge over the river Makama.

Leivaniemi. No apartments for travellers. The ice having destroyed all the bridges between this and Tornea, we were obliged to cross several branches of the river Licdakala in a ferry-boat, as likewise the river Kumo. At last you pass the river Tornea by means of a ferry, leaving the horses on the left bank, and taking with you your luggage only.

Tornea is a small trading town, situated upon a peninsula at the mouth of the river Tornea. You go some way up the river, and leave on your right a small wood of pine-trees, the only ones in this vicinity.

Kukko : this word signifies in the Finnish language a *cock*. Two or three houses, without any accommodation for travellers.

Frankila. No lodging for passengers. You go close by a small country house belonging to Mr. Richard, a merchant of Tornea.

JOURNEY FROM

Stages between Uleborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Korpicula.....	1½	June 17.....	3 horses 2 carts 3 men	0 33 0 4 0 9
Kirkomekis.....	1½	Arr. about midnight. June 18. Departed early.	3 horses 2 carts 3 men	0 33 0 4 0 9
Niemis.....	1½	.....	3 horses 2 carts 3 men	0 18 0 4 0 9
Mattorenge, or Ofver Tornea.....	1½	Arrived about noon. June 20. Departed about noon.	3 horses 2 carts 3 men*	0 30 0 4 0 9
Kaulimpe.....	1	.....	2 boats and 4 men	0 22
Tolufis, or Juoxengé	1½	.....	2 boats and 4 men	0 28
Tortula.....	1	June 21..... Arr. 10 a. m.	2 boats and 4 men	0 22

* Here is an end of roads and horses, and you must henceforth travel in boats. I reckon that a gentleman, with his servant and an interpreter, which is necessary in this country, cannot do with less than two boats, especially on account of the baggage and provisions, which take up a good deal of room. The following calculation of expences is therefore made, upon the supposition that two boats and four rowers are employed.

LOCAL OBSERVATIONS.

Korpicula, signifies, *a place covered with wood*. No dwelling for strangers: there are but two houses on the right bank of the river, which at this place forms a round basin or little lake. You have a view of the waterfall called *Markakoski*.

Kirkomeki means, in the language of the country, *a church on a hill*. There is a church and pretty good lodgings.

Nenit signifies a *promontory*. There is a house on the left bank of the little river Armasjoki, and a small wooden bridge over the river. The road continues hilly.

Mattorenge is the name of the village, and *Osver Tornea*, or *Upper Tornea*, that of the church, the parish, and the rector's house, situated on the right bank of the river *Tornea*. Opposite, on the left bank, is the mountain *Avasaxa*. We proceeded in a boat on the river *Tornea*.

Kaulimpe. Some peasant's houses on the left bank of the river. They here fish for salmon; and there are people to attend you with their boats in your journey up the river.

Tulufis. Here you change boats. You pass the waterfalls of *Kattila Koski*, where the French academicians have fixed the transit of the polar circle.

Tortula. Here you may get a lodging, and change boats, with people to row you. There are many waterfalls to pass, and six hours were occupied in performing these two miles. The most remarkable waterfall is that of *Poroskeski*. You have a view of mount *Kittis*, the last, which served for the trigonometrical operations of *Maupertuis*.

JOURNEY FROM

Stages between Uleaborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.*	Expences in Swedish Money.
Pello.....	2	June 21. Arr. 4 p. m.	2 boats and 4 men	Rix-d. skil. 0 .46
Kardis.....	3	.....	2 boats and 4 men	1 .18
Kengis Bruk.....	2½	Arrived June 22. Departed June 25.	2 boats and 4 men	1 .12
Kollarc.....	3½	Departed June 26.	morn. 19° Ø noon 24° Ø even. 10° Ø heat of the sun 36° Ø the water 15° Ø	2 boats and 4 men 2 .42
Muonionisca.....	11	Staid till July 1.	June 27. morning 19° noon 19 evening 17 water 15 the sun + June 28. mo. 13° no. 15° ev. 13° wa. 15° June 29. mo. 13° no. 15° ev. 9° wa. 14° June 30. mo. 10° no. 25° ev. 22° wa. + + sun + July 1. mo. 23° no. 27° ev. 23° wa. 15° sun 37°	2 boats and 4 men 5 .36

LOCAL OBSERVATIONS.

Pello. Close to that place is an iron foundery called Swanstein. Here are boats and attendants to be had.

Kardis, a peasant's house. Boats and attendants to be had.

At *Kengis Bruk* is an iron foundery, the inspector of which lives in a good and convenient house: a great waterfall. Near this place the river Tornea joins the river Muonio.

Kollare is a small village where the peasants seem to be in pretty easy circumstances: boats and attendance. Here we had the famous Simon, the most active and expert Finlander of any we ever met with, in mounting up and descending from the waterfalls. Some of them in this direction are quite impassable; you are then obliged to drag the boat for a mile over land, among woods that are almost impenetrable.

Muonioniska, a small hamlet, with a church and a parson. You may get a lodging here, and boats with attendance. Between Kollare and Muonioniska you meet with a small colony called Kiglange, consisting only of two families that are very poor.

JOURNEY FROM

Stages between Uleaborg and the North Cape.	Swedish miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Ofver Muonionisca	1	July 1.	morn. 18° 5 noon 29 even. 19 water 18 sun 45	N. B. kind skit.
Kelketsuando	1 1/4	.....	.....	The whole of this journey
Pallajoveniö	3	July 3.	morn. 25° 0 noon 27 even. 20 water 21 sun 35	was per- formed with 2 boats and 4 men,
Suontajervi	5	.....	.....	without chang-
Lappajervi	5	.....	.....	ing, for which we paid to- gether. 12 0
Pallojervi	2	.....	.....
Kintasara	1	July 4. Staid till July 6.	morn. 17° 5 noon 18 even. 11 water 19 sun *	
Restijöki	1	.....	.....	N. B. From this place we engaged some Laplans- ders, at

LOCAL OBSERVATIONS.

Ofver Muonionisca, or Upper Muonionisca. The habitation of a Finnlander. There are no boats to be had at this place. The people of Muonionisca brought us as far as Restijöki.

Kelketsuando: a small Finnish settlement. The merchants of Tornea have built here an apartment with a fire-place, to stop at in their journeys to the fairs in winter.

Pallajoveniö is the first Finnish colony in Lapland, properly so called. You pass the frontiers of Ostrobothnia between Kelketsuando and Pallajoveniö.

Suontajervi. Here lives a single Lapland family, close by a lake of the same name (*jervi* signifies a lake). No boats are to be had here in summer, because the Laplanders go from home to fish.

Lappajervi, a Lapland settlement, about half a mile (Swed.) in the interior of the country, on the right of the river. No boats to be had.

Pallojervi, a lake without any habitation near it.

Kintafari, an island in the lake of Pallojervi, without any permanent habitation. Some Laplanders occasionally stay there during the fishing season.

Restijöki: the name of the river which flows into the lake of Pallojervi. A desert country. We fell in with some wandering Laplanders on the right bank of the river. You are obliged to go on foot.

JOURNEY FROM

Stages between Uleaborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Kevijervi.....	1	July 6.	morn. 14° 0 noon 29 even. 17 water 18 sun 45	rix-d. per day to at- tend us. We had seven of them for a day and a half as far as Kauto- keino, which made to- gether a sum of .
Ajtijervi.....	1	.....	.....	5 12
Kautokeino.....	6*	July 7.	morn. 19° 0 noon 27 even. 20 water 19 sun 43	.....
			July 8. morn. 15° 0 noon 22 even. 16 water 15 sun +	.....
			July 9. morn. 14° 0 noon 25 even. 13 water 19+	.....
Keinowappi.....	4	.....	sun 40	.....

* Here begin the Norwegian miles, which bear to the Swedish a proportion as 18 to 16.

† The temperature of the water I generally took about 6 or 7 o'clock in the evening.

LOCAL OBSERVATIONS.

Kevijervi, a lake, without any habitation near it, and a desert country. This lake is upon the frontier of Norwegian Lapland, which the Danes call *Finmarken*.

Ajijervi: another lake: no dwelling near it. You neither meet with people nor houses till you come to *Kautokeino*, to which place you proceed down the river *Peppojovaivi*.

Kautokeino is a small Lapland village. There is a church, and in winter also a clergyman. Here you may hire boats and men to pursue your journey.

Keinowappi, a place on the left bank of the river, where we passed the night under our tent. No houses nor people; the country quite-desert.

JOURNEY FROM

Stages between Uleborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Mari.....	4½	July 10.	morn. 14° 0 noon 20 even. 17 water 17 sun 37	N. B.
Koinosjoki.....	1½	July 11.	morn. 13° 0 noon 17 even. 18 water 17 sun +	From Kauto- keino to Alten we had six men at $\frac{1}{2}$ rix-dol.
Salvargot.....	2	July 12.	morn. 9° 0 noon 9 even. 7	each a day, which makes for five days....
Lainie.....	4½	.....	.....	15 0
Alten	1	Arrived July 13. July 15, Departed about noon.	July 13, made no ob- servations. July 14, morn. 20° 0 noon 26 even. 23 water of the icy sea 11° 0 sun 30 morn. 19° 0 noon 20 even 16 water of the icy sea 10° 0 sun 26	

* I always measured the temperature of the water on the surface, having no instrument to go deeper; and when I was at Alten I only measured it on the shore, and did not go out to sea in a boat.

LOCAL OBSERVATIONS.

Mari. Here is a small church for the convenience of the Laplanders in winter. No body lives here in summer. Hence you meet with neither houses nor people till you get close to Alten.

Koinosjoki is the name of a river (*joki* signifies a river). Here we quitted the river Alten and our boats, to traverse the mountains on foot. No vestige of a human habitation all this way.

Salvargot: a deserted cottage, where we passed the night in the midst of mountains. We again joined the river Alten near the spot where it receives the river Katiojoki. Unless you meet with some people that are fishing for salmon, you are obliged either to swim across the river, or to go up its banks till you find a place which is fordable.

Lainie is a small village, where we stopt before we proceeded to Alten.

Alten is only the house of a merchant, with some establishment of peasantry about it. It is situated on the gulf of Alten Fiord, which is an arm of the Frozen Ocean. A quarter of a mile hence (Swed. or Norwegian) is Altengaard, which is properly the residence of the bai-liff of Norwegian Lapland, and belongs to the government of Drontheim.*

JOURNEY FROM

Stages between Uleaborg and the North Cape.	Swedish Miles.	Arrival and Departure.	State of the Weather. Thermometer of Celsius.	Expences in Swedish Money.
Proceeded on the Journey towards the North Cape.	.....	July 16.	morn. 15° Ø noon 17 even. 10 water of the icy sea 6° Ø sun 24	Rix-d. skil. N. B. The whole of the expence, with one boat and 4 rowers from Al- ten to
Havesund.....	10	July 17.	morn. 9° Ø noon 11 even. 10 sea 6 sun 24	the North Cape amount- ed to... 5 12
NORTH CAPE.....	3	July 18, Arrived at midnight.	morn. 12° Ø noon 15 even. 20 sea 6 sun 26	

ULEABORG TO THE NORTH CAPE.

LOCAL OBSERVATIONS.

Havefund: the house of a merchant, upon an island which forms a strait called by that name. *Sund* signifies a strait.

The *North Cape* is the most northern point of Meagre Island, in the Norway tongue called *Magerön*, under $71^{\circ} 10'$ north latitude.

As for my Return, the Route may be seen upon the Map prefixed to the Second Volume.. The Expences were nearly the same; and I shall only transcribe my meteorological Observations, for the Sake of those who are curious about such Remarks.

<i>July 19.</i>	<i>On the Icy Sea, or the Frozen Ocean</i>	morning	22° 0'
		noon	25
		evening	19
	<i>Water of the Icy Sea</i>		7
	<i>The Sun</i>	-	30
<i>July 20.</i>	<i>On the Icy Sea, in returning to Alten</i>	morning	24
		noon	26
		evening	23
	<i>Water of the Icy Sea</i>		13
	<i>The Sun</i>	-	30

A perfect calm reigned on the sea, and I do not remember having ever suffered greater heat in my life than in this journey. The calms here perfectly resemble those which Vaillant and other travellers describe at the Cape of Good Hope.

<i>July 21.</i>	<i>At Alten</i>		morning	25° 6'
			noon	27
			evening	25
		The sea water near the shore		13
<i>July 22.</i>	<i>At Altcn</i>	The sun	-	42
			morning	20
			noon	21
			evening	16
			sun	32

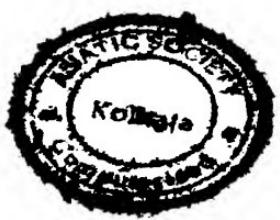
July 23 and 24 was prevented from making observations.

July

<i>July 25.</i>	At Alten	-	-	morning	10° 6
				noon	12
				evening	9
<i>July 26.</i>	Set off from Alten	-	-	morning	10
				noon	13
				evening	9
<i>July 27.</i>	Passed the mountains; gloomy weather Some snow fell	-	-	morning	9
				noon	6
				evening	3
<i>July 28.</i>	Among the mountains	-	-	morning	3
				noon	4
				evening	4
<i>July 29.</i>	On the river Alten, returning to Kautokeino	-	-	morning	4
				noon	5
				evening	5
			Water of the river		14
			sun		+
<i>July 30.</i>	At Kautokeino	-	-	-	morning 9
				noon	12
				evening	11
<i>July. 31.</i>	On our way from Kautokeino to Enontekis Gloomy weather	-	-	morning	8
				noon	10
				evening	3
<i>August 1.</i>	Among the mountains on the boundary of Swedish and Norwegian Lapland	-	-	morning	2
				noon	11
				evening	11
<i>August 2.</i>	-	-	-	morning	8
				noon	11
				evening	11
	We arrived at Enontekis towards the evening				
<i>August 3.</i>	On the river Muonio	-	-	morning	5
				noon	8
				evening	6
					<i>August</i>

<i>August</i>	4. On the river Muonio	morning	6° 5
		noon	10
		evening	6
<i>August</i>	5. At Muonionisca	morning	6
		noon	11
		evening	8
<i>August</i>	6. On the river Muonio	morning	7
		noon	7
		evening	6
<i>August</i>	7. At Kengis	morning	6
		noon	8
		evening	7
<i>August</i>	8. On the river Tornea	morning	8
		noon	11
		evening	9
<i>August</i>	9. At Ofver Tornea	morning	8
		noon	10
		evening	7
<i>August</i>	10. At Tornea	morning	7
		noon	9
		evening	6
<i>August</i>	11. This day we travelled from Tornea to Uleaborg, and arrived at the latter place towards the evening.		

F I N I S.



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